

2133

AV-27D200  
AV-32D200

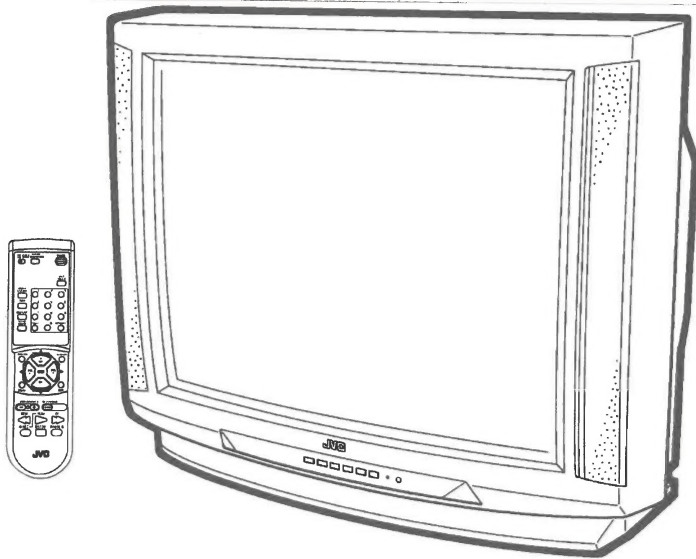
JVC

SERVICE MANUAL

COLOR TELEVISION

AV-27D200 (US&CA)  
AV-32D200 (US&CA)  
AV-32D200 (A US&A CA)

BASIC CHASSIS
GR



CONTENTS

■ SPECIFICATIONS .....	2
★ OPERATING INSTRUCTIONS (APPENDED) .....	1-1
■ SAFETY PRECAUTIONS .....	3
■ HOW TO IDENTIFY MODELS .....	4
■ FEATURES .....	5
■ FUNCTIONS .....	6
■ SPECIFIC SERVICE INSTRUCTIONS .....	7
■ SERVICE ADJUSTMENTS .....	13
★ STANDARD CIRCUIT DIAGRAM (APPENDED) .....	2-1
■ PARTS LIST .....	33

# OPERATING INSTRUCTIONS

# JVC<sup>®</sup>

## *Color Television User's Guide*

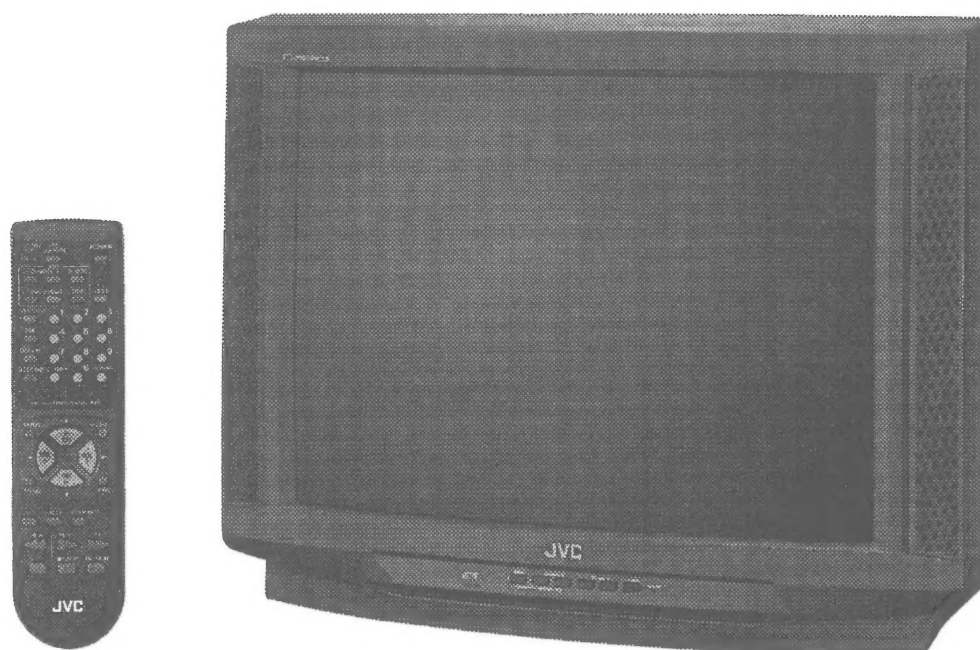
***For Models:***

***AV-32D500***

***AV-32D200***

***AV-27D500***

***AV-27D200***



*Illustration of AV-27D500 and RM-C343*

### **IMPORTANT NOTE TO THE CUSTOMER:**

In the spaces below, enter the model and serial number for your television (located on the rear of the television cabinet).  
Staple your sales receipt or invoice to the inside cover of this guide.  
Keep this user's guide in a convenient place for future reference.  
Keep the carton and original packaging for future use.


---

Model Number


---

Serial Number

# IMPORTANT SAFETY PRECAUTIONS



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**



**CAUTION:** To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## IMPORTANT SAFEGUARDS

### CAUTION:

**Please read and retain for your safety.** Electrical energy can perform many useful functions. This TV set has been engineered and manufactured to assure your personal safety. But *improper use can result in potential electrical shock or fire hazards.* In order not to defeat the safeguards incorporated in this TV set, observe the following basic rules for its installation, use and servicing. And also follow all warnings and instructions marked on your TV set.

### INSTALLATION

- 1 Your TV set is equipped with a polarized AC line plug (one blade of the plug is wider than the other).



This safety feature allows the plug to fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should it still fail to fit, contact your electrician.

- 2 Operate the TV set only from a power source as indicated on the TV set or refer to the operating instructions for this information. If you are not sure of the type of power supply to your home, consult your TV set dealer or local power company. For battery operation, refer to the operating instructions.

- 3 Overloaded AC outlets and extension cords are dangerous, and so are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.

- 4 Do not allow anything to rest on or roll over the power cord, and do not place the TV set where power cord is subject to traffic or abuse. This may result in a shock or fire hazard.

- 5 Do not use this TV set near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near swimming pool, etc.

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS TV SET TO RAIN OR MOISTURE.

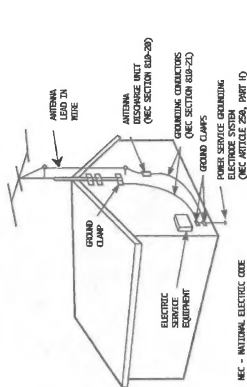
**CAUTION:** TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified on the unit.
  2. Avoid damaging the AC plug and power cord.
  3. Avoid improper installation and never position the unit where good ventilation is unattainable.
  4. Do not allow objects or liquid into the cabinet openings.
  5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.
- Changes or modifications not approved by JVC could void the warranty.
- \* When you don't use this TV set for a long period of time, be sure to disconnect both the power plug from the AC outlet and antenna for your safety.
- \* To prevent electric shock do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

- 6 If an outside antenna is connected to the TV set, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection requirements for the grounding electrode.

- 7 An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

**EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE**



- 8 TV sets are provided with ventilation openings in the cabinet to allow heat generated during operation to be released. Therefore:

- Never block the bottom ventilation slots of a portable TV set by placing it on a bed, sofa, rug, etc.
- Never place a TV set in a "built-in" enclosure unless proper ventilation is provided.
- Never cover the openings with a cloth or other material.
- Never place the TV set near or over a radiator or heat register.

- 9 To avoid personal injury:

- Do not place a TV set on a sloping shelf unless properly secured.
- Use only a cart or stand recommended by the TV set manufacturer.
- Do not try to roll a cart with small casters across thresholds or deep pile carpets.
- Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

### USE

- 10 Caution children about dropping or pushing objects into the TV set through cabinet openings. Some internal parts carry hazardous voltages and contact can result in a fire or electrical shock.

- 11 Unplug the TV set from the wall outlet before cleaning. Do not use liquid or an aerosol cleaner.

- 12 Never add accessories to a TV set that has not been designed for this purpose. Such additions may result in a hazard.

- 13 For added protection of the TV set during a lightning storm or when the TV set is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to product due to lightning storms or power line surges.

- 14 A TV set and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the TV set and cart combination to overturn.



### SERVICE

- 15 Unplug this TV set from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - A. When the power cord or plug is damaged or frayed.
  - B. If liquid has been spilled into the TV set.
  - C. If the TV set has been exposed to rain or water.
  - D. If the TV set does not operate normally by following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV set to normal operation.
  - E. If the TV set has been dropped or damaged in any way.
  - F. When the TV set exhibits a distinct change in performance — this indicates a need for service.

- 16 Do not attempt to service this TV set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

- 17 When replacement parts are required, have the service technician verify in writing that the replacement parts he uses have the same safety characteristics as the original parts. Use of manufacturer's specified replacement parts can prevent fire, shock, or other hazards.

- 18 Upon completion of any service or repairs to this TV set, please ask the service technician to perform the safety check described in the manufacturer's service literature.

- 19 When a TV set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the TV set.

- 20 Note to CATV system installer.

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

## WELCOME!

Congratulations on your new television purchase! We thank you for choosing JVC.

We know you are anxious to start watching your new television, but before you operate it, please read this guide and then keep it handy for future reference. After all, you just bought a great TV with a lot of terrific features, you should know what each feature is and how to use it properly!

Please note as you read through this guide, that there are illustrations of select models for your reference. There are several models in this guide and therefore each illustration will not be of the model you own. Just be sure to look for the similar feature on your TV.

Again, congratulations and thank you for choosing JVC! Enjoy!

## TABLE OF CONTENTS

<b>CONNECTIONS</b>	Sound Adjust . . . . .	23
Connections Checklist . . . . .	Bass	
Front and Rear Panel Diagrams . . . . .	Treble	
Cable & VCR Connections . . . . .	Balance	
Connecting to a DVD Player . . . . .	MTS (Multi-channel Stereo Sound)	
Connecting to a Camcorder . . . . .	Some Sound Advice	
Connecting to an External Amplifier . . . . .	Clock/Timers . . . . .	24
Connecting to JVC AV Compu Link EX	On/Off Timer	
Capable Components . . . . .	Initial Setup . . . . .	25
	TV Speaker	
	Audio Out	
	Component-In	
	Closed Caption	
<b>GETTING STARTED</b>		
Remote Controls . . . . .		
Power . . . . .		
Adjusting Volume . . . . .		
Changing Channels . . . . .		
Setting the CATV and VCR codes . . . . .		
<b>MENU FUNCTIONS</b>		
Symbols Used in this Guide . . . . .		
Onscreen Menus . . . . .		
Plug In Menu . . . . .		
Language		
Auto Tuner Setup		
Set Clock . . . . .		
Finish		
Initial Setup . . . . .		
Channel Summary		
Channel Guard-Lock		
V-Chip . . . . .		
Set Lock Code . . . . .		
Picture Adjust . . . . .		
Tint		
Color		
Picture		
Bright		
Detail		
Noise Muting		
Set Video Status		
<b>APPENDICES</b>		
Troubleshooting . . . . .		29
Limited Warranty . . . . .		30
Authorized Service Centers . . . . .		31
Specifications . . . . .		32

# 5 CONNECTIONS

## CONNECTIONS CHECKLIST — READ ME FIRST!

The Connections Checklist section of this guide is a list of ideas to keep in mind when you set out to perform your connections. It is designed to help us not-so-technically-advanced individuals. If you read this section, and can't identify the plugs, connectors, and components you have, do not be afraid to seek help.

- 1) Refer to the connection instructions in the user's guide for each component you plan to connect. They will provide more detailed information about their products, and they will tell you what plugs and cables are required.
- 2) Most AV input jacks and plugs are color coded:
  - Yellow plugs are Video connections
  - Red plugs are for Right Audio connections
  - White plugs are Left Audio (Mono) connections
- 3) Perform one hookup at a time. If you have many accessories to connect, make sure each connection is correct by checking to see that it works properly before attempting the next connection. (For example, always start with the RF or Cable connections, make sure it works, then move on to video or VCR connections.)
- 4) Unplug the power cord between each connection.
- 5) Each jack on the back of the TV is labeled. If you read these instructions and still do not fully understand the connections process, seek assistance.
- 6) The AV Compu Link Cable is supplied with the JVC device which you want to connect. If you do not have one, but you do have a JVC Compu Link capable VCR or HiFi, contact your local JVC dealer.

### RF Connectors



### S-Video Plug



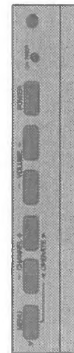
### AV Input Plug



### AV Compu Link Cable

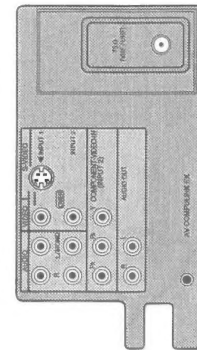


## FRONT AND REAR PANEL DIAGRAMS



### FRONT PANEL DIAGRAM

AV-32D500 • AV-32D200  
AV-27D500 • AV-27D200



### REAR PANEL DIAGRAM

AV-32D500 • AV-32D200  
AV-27D500 • AV-27D200





## CONNECTIONS

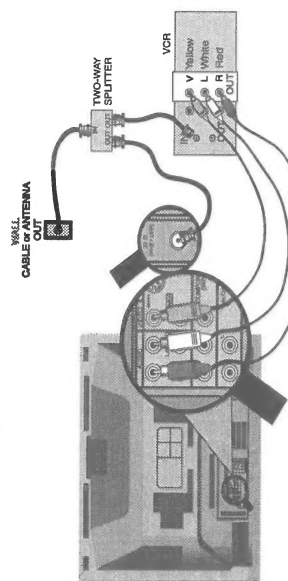
### CABLE & VCR CONNECTIONS

There are three basic types of antenna or cable hookups. For VCR hookup only, see the Quick Setup Guide.

- 1) If you have an antenna, or a cable TV system that does not require you to use a cable box to tune the channels, use **Diagram #1**.
- 2) If you have a cable system that requires you to use a cable box to access **all** channels, use **Diagram #2**.
- 3) If you have a cable system that requires you to use a cable box to access **certain** premium channels, but not regular basic channels, use **Diagram #3**.

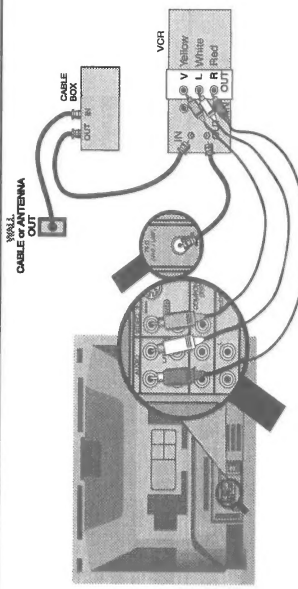
For information on working Picture in Picture (PIP), please see the PIP section on page 28.

#1



- 1) Connect cable or antenna RF wire out from the wall, in to the splitter RF input.
  - 2) Connect RF wire out from the splitter RF output, in to the VCR RF input.
  - 3) Connect RF wire out from the splitter RF output, in to the TV VHF/UHF input.
  - 4) Connect yellow video cable out from the VCR Video output, in to the TV Video input jack.
  - 5) Connect white audio cable out from the VCR Left Audio output, in to the TV Left Audio input jack.
  - 6) Connect red audio cable out from the VCR Right Audio output, in to the TV Right Audio input jack.
- ☐ If your VCR is mono it has only one audio out jack, connect it to TV L/Mono input.

#2



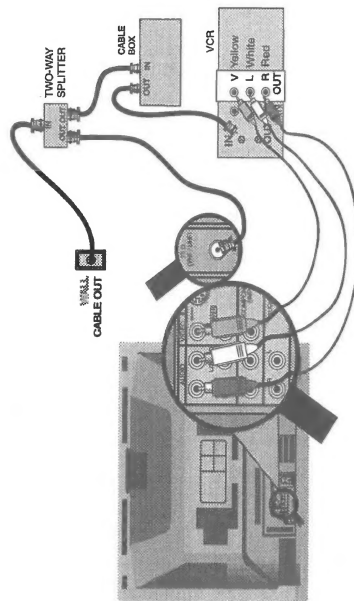
- 1) Connect the cable RF wire out from the wall, in to the cable box input.
  - 2) Connect RF wire out from the cable box RF output, in to the VCR RF input.
  - 3) Connect RF wire out from the VCR RF output, in to the TV VHF/UHF input.
  - 4) Connect yellow video cable out from the VCR Video output, in to the TV Video input jack.
  - 5) Connect white audio cable out from the VCR Left Audio output, in to the TV Left Audio input jack.
  - 6) Connect red audio cable out from the VCR Right Audio output, in to the TV Right Audio input jack.
- ☐ If your VCR is mono it has only one audio out jack, connect it to TV L/Mono input.



## CONNECTIONS

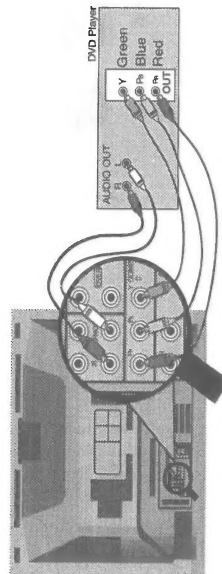
### CABLE & VCR CONNECTIONS CONTINUED

#3



- 1) Connect Cable RF wire out from wall, in to splitter RF input.
  - 2) Connect RF out from splitter RF output, in to cable box RF input.
  - 3) Connect RF wire out from cable box RF output, in to VCR RF input.
  - 4) Connect RF wire out from splitter RF output, in to TV VHF/UHF input.
  - 5) Connect yellow video cable out from VCR Video output, in to TV Video input jack.
  - 6) Connect white audio cable out from VCR Left audio output, in to TV Left Audio input jack.
  - 7) Connect red audio cable out from VCR Right Audio output, in to TV Right Audio input jack.
- ☐ If your VCR is mono it has only one audio out jack, connect it to TV L/Mono input.

### CONNECTING TO A DVD PLAYER



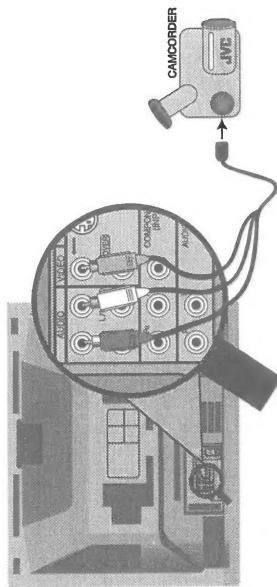
- 1) Connect green cable out from DVD player "Y" video output, in to TV "Y" component input.
  - 2) Connect blue cable out from DVD player "Pb" video output, in to TV "Pb" component input.
  - 3) Connect red cable out from DVD player "Pr" video output, in to TV "Pr" component input.
  - 4) Connect red audio cable out from DVD Left audio output, in to TV Left Audio input 2.
  - 5) Connect white audio cable out from DVD Right audio output, in to TV Right Audio input 2.
- ☐ Green, blue and red are the most common colors of DVD cables. Some models may vary cable colors, please consult the user's manual for your DVD player for more information.
- ☐ Be careful not to confuse the red DVD cable with the red audio output cable. It is best to complete one set of connections (DVD or audio output) before starting the other to avoid accidentally switching the cables.
- ☐ Please set the COMPONENT-IN on the Initial Setup Menu to "YES" whenever you connect a DVD player.



## 8 CONNECTIONS

### CONNECTING TO A CAMCORDER

Play your home movies back through your TV by connecting your camcorder to the TV's AV inputs.



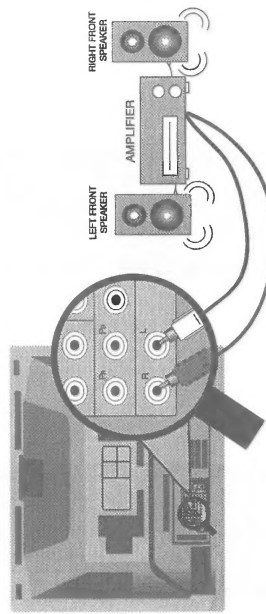
- 1) White audio cable out from camcorder, in to TV Left Audio input jack.
- 2) Yellow video cable out from camcorder, in to TV Video input jack.
- 3) If you have a stereo model camcorder, connect the Red Audio cable out from the camcorder, in to the TV Right Audio input jack.

#### TO CONNECT TO S-VHS ACCESSORIES:

Keep the audio connections the same as for a non-S-VHS VCR or camcorder (above), and use the special S-VHS cable that came with the VCR or Camcorder.

- 1) S-VHS Plug out from VCR, in to TV's S-Video input.

### CONNECTING TO AN EXTERNAL AMPLIFIER



- 1) White audio cable out from TV Left Audio output jack, in to Amplifier [Left] input.
- 2) Red audio cable out from TV Right Audio output jack, in to Amplifier [Right] input.

NOTE: A) Set the TV Speaker to OFF (page 25), switch the audio output to VARI (page 25), and adjust the sound with the TV remote's VOLUME button.

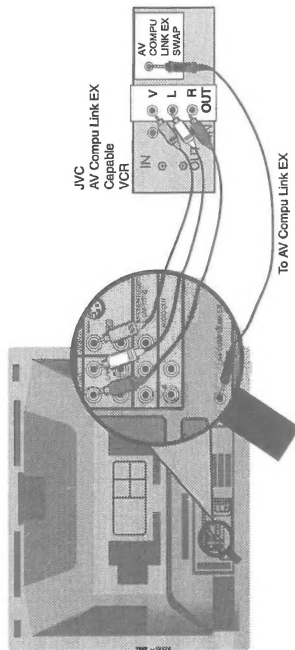


## 9 CONNECTIONS

### CONNECTING TO JVC AV COMPU LINK EX CAPABLE COMPONENTS

AV Compu Link EX makes playing video tapes totally automatic. Simply insert a pre-recorded tape\* into the JVC brand VCR, and the VCR automatically turns on and starts playing. At the same time, the VCR sends an AV Compu Link EX signal to the television telling it to turn on and switch to the correct video input.

NOTE: The AV Compu Link EX cable may be included with the AV Compu Link capable accessory you intend to connect. If it is not, contact an authorized JVC Service Center for Part # EWP 805-012.



#### NOTES:

- A) The AV Compu Link EX cable has a male 3.5 mm (mono) mini plug on each end.
- B) If your JVC brand VCR has A Code/B Code Remote Control Switching (see your VCR instructions), using VCR A Code will switch the TV to Video Input 1. If you use Input 1 for Video out from the cable box, use Input 2 here. Using B Code will switch the TV to Video Input 2.
- C) To connect a JVC HiFi receiver or amplifier for a completely automated home theater, see the HiFi receiver's instructions for detailed hookup diagrams.

\* In order for the VCR to start playback automatically, the recording tabs must be removed from the VHS tape. If the tab is in place, automatic switching starts when you push the VCR PLAY button.

\*\* AV COMPU LINK EX is compatible with the following 1998 receivers: RX-664V, RX-665V, RX-774V, RX-884V, RX-1024V, and later receiver models.

\*\*\* Please consult the user's manual for your JVC DVD Player on how to connect a JVC DVD Player using AV Compu Link EX.

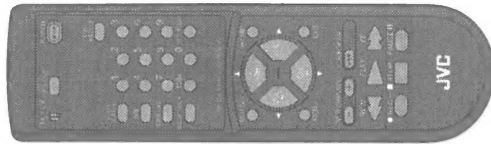


## GETTING STARTED

### REMOTE CONTROLS



RM-C343  
AV-32D500 • AV-27D500



RM-C342  
AV-32D200 • AV-27D200

### CHANGING THE BATTERIES

Be sure to use only size AA batteries.

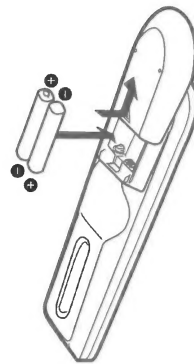
- 1** Push down on the remote's back cover and slide towards the bottom to remove it.
- 2** Insert the two supplied AA batteries, carefully noting the "+" and "-" markings on the batteries and remote control.
- 3** To avoid a short circuit, insert "-" end first. Slide the cover back into place (until it clicks into position).

☐ If the remote control acts erratically, replace the batteries. Typical battery life is usually about six months to one year.

☐ We recommend alkaline batteries for a longer battery life.

#### NOTE:

When you change the batteries, try to complete the task within 3 minutes. If it takes longer than 3 minutes, the remote control codes for your VCR and/or Cable box will have to be reset (page 12).



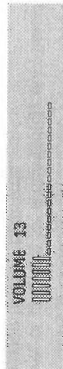
## GETTING STARTED

### POWER

- ☐ Make sure that the TV/CATV switch is set to TV. Switch to CATV only to operate a cable box.
- ☐ Press the POWER button on the remote control or the TV front panel. The On Timer lamp will glow red.
- ☐ The first time you turn on the TV, the "Plug In Menu" will appear. You should turn to the Plug In Menu section (page 15) now to learn more about this menu.
- ☐ To turn the power off, press the POWER button again. The On Timer lamp will go out.
- ☐ When the TV is off, the On/Off Timer remains on while the On/Off Timer function is active, but at a reduced brightness.

### ADJUSTING VOLUME

- 1** Use the VOLUME +/- buttons (◀▶) on the front panel or remote control. Use the VOLUME - (◀) button to lower the volume. Press the VOLUME + button (▶) raise the volume.



- 2** Press the Muting button to instantly turn the volume off to zero. To restore the volume to the previous volume level, simply press the Muting button again.

### CHANGING CHANNELS

- 1** 10 key direct access.

Press the numbers on the remote's 10 key pad. For single-digit channel numbers press 0 then the number. For channels above 100, press the 100+ button plus the 2-digit number.

- 2** Ch/Hyper Scan button.

• To scan the channels one at a time, press the remote's Ch/Hyper Scan button and release.

• To scan through the channels very quickly, hold down the remote's Ch/Hyper Scan button.

After two channels go by at normal speed, the rest of the channels will speed by at the rate of five channels per second. You will not see pictures on the channels, only the changing channel numbers at the bottom of the screen.

- 3** Return.

Press and release the RETURN+ button to return to the previous channel. First, select a channel (game #1). Then, select another channel (game #2) with the 10 key pad and push the RETURN+ button to flip directly back and forth.

- 4** Return+.

Press and hold down the RETURN+ button for three seconds. The message, "RETURN CHANNEL PROGRAMMED !" will appear and you can scan as you wish. Press RETURN+ again and you will go back to the Return+ channel.

To cancel a Return+ channel, press and hold down the RETURN+ button for another three seconds and the message, "RETURN CHANNEL CANCELLED !" appears.

- ☐ Pressing a number key or turning the set off will also cancel a Return+ channel.



## GETTING STARTED

### SETTING THE CATV & VCR CODES

Many CATV & VCR brands have more than one code. If the first code in the list does not work, try the other codes listed. If your CATV box or your VCR do not respond to any of the codes listed for the manufacturer and search code function, use the remote control for that accessory to operate it.

#### CABLE BOX OR SATELLITE SETUP

The remote is programmed with the CATV and Satellite codes for power on and off, 10 key, and channel up and down.

- 1) Determine the correct code from the "CATV & Satellite Codes" chart below.
- 2) Slide the 2-Way Mode Selector Switch to CATV.
- 3) Press and hold down the Display button.
- 4) Enter the 3-digit code with the 10 key pad while continuing to hold down the Display button.
- 5) Release the Display button.
- 6) Confirm the operation of the cable box.

**Note :** If your cable box or satellite box does not respond to any code on the chart, use the Search Codes Function below.

#### CATV & Satellite Codes

CABLE BOXES	CODES	CABLE BOXES	CODES	DIGITAL SATELLITE SYSTEMS	CODES
ABC	024	Puser	032		
Ancher	032, 025	RCA	061		
Cableview	051, 032	Realistic	032	EchoStar	100
Citizen	022, 051	Regal	058, 064, 040, 041, 042, 045,	G.E.	106
Curtis	058, 059		069	Gradiente	112
Diamond	024, 032, 025	Regency	034	Hiachi	104, 111
Eagle	029	Rembrandt	037, 032, 051, 038	HNS (Hughes)	104
Eastern	034	Samsung	051	Panasonic	105
GC Brand	032, 051	Scientific Atlanta	057, 058, 059	Philips	102, 103
Gemini	022, 043	SL Mark	051, 047	Primostar	108
General Instrument	065, 024, 025, 026, 027, 020,	Spurcar	051, 056	RCA	105, 106, 110
	021, 022, 057, 023	Stargate	032, 051	Sony	107
Hamlin	040, 041, 042, 045	Telecaption	047, 051	Toshiba	101
Hiachi	049, 024	Teleview	044	Uniden	102, 103
Jerrold	085, 024, 025, 026, 027, 020,	Texcan	035, 036, 066		
	021, 022, 057, 023	Ushita	060		
Macom	049, 050, 051, 054	Unita	032, 025		
Magnavox	033	Universal	052, 032		
Memorex	030, 051	Videostar	026, 030		
Noveltime	032, 037, 048	Zenith	053, 045		
Oak	035, 056, 060				
Panasonic	063	Zenith/Drake	046		
Philips	028, 029, 030, 052, 053, 031,	Satellite			
	069				
Pioneer	047, 062				
Pulsar	051, 032				

#### Search Codes Function :

- 1) Slide the 2-Way Mode Selector Switch to CATV.
- 2) Press the TV POWER and RETURN+ buttons simultaneously for more than three seconds, then release.
- 3) Press TV POWER and check if the accessory responds.
- 4) If there was a response, press RETURN+. If there was no response, repeat Step 3 until there is a response. If you repeat Step 3 more than 70 times and there is still no response, use the accessory remote.



## GETTING STARTED

#### VCR SETUP

The remote is pre-programmed with the VCR codes for power on and power off, play, stop, fast-forward, rewind, and channel up and down.

- 1) Determine the correct code from the "VCR Codes" chart (below).
  - 2) Slide the 2-Way Mode Selector Switch to TV.
  - 3) Press and hold down the Display button.
  - 4) Enter the 3-digit code with the 10 key pad while continuing to hold down the Display button.
  - 5) Release the Display button.
  - 6) Confirm the operation of the VCR.
- ☐ When you record a channel, press the PLAY button while continuing to hold down the Rec button.

**Note :** If your VCR does not respond to any code on the chart, use the Search Codes Function below.

#### VCR Codes

VCRs	CODES	VCRs	CODES	VCRs	CODES
Admiral	035	Magnavox	031, 023, 024, 066	Samsung	037, 060, 062, 033, 089
Alvco	027, 032	Marantz	003, 004, 005	Sanyo	003, 026, 020, 052
Arcor	029, 072, 073, 074	Marta	064	Servo	063, 067, 091, 071
Audio Dynamic	003, 005	Memorex	024, 067	Scott	059, 060, 062, 067, 038, 040,
Bell & Howell	063, 071	MGA	038, 040, 047, 048, 041, 042		047, 048, 026, 020
Brooksline	020, 026	Minolta	068, 045	Sears	063, 064, 085, 086, 058
Canon	023, 025	Mitsubishi	038, 040, 047, 048, 041, 042,	Shantom	075
CCE	043	Multitech	078, 090	Sharp	035, 036, 090, 088
Citizen	084	NEC	047, 027, 062	Signature 2000	027, 035
Craig	063, 029, 064	Olympic	003, 004, 005, 000	Singer	075
Curtis Mathies	045, 024, 027	Olympic	024, 023	Sony	028, 029, 030, 053, 054, 055
Daewoo	043, 059, 024	Olympus	028, 021, 035, 064	SV2000	027
DBX	003, 004, 005	Orion	026, 020	Sylvania	031, 021, 024, 027
Dinensia	045	Parasonic	023, 024, 021, 022	Symphonic	027, 081
Emerson	043, 026, 077, 061, 025, 042,	Penney	024, 058, 045, 063, 003, 004,	Tadpole	064
	020, 076		005	Tadpole	003, 004, 005
Fisher	063, 068, 067, 065, 071	Peritax	058, 005, 045	Teac	003, 003, 027, 005
Furuli	027, 026, 020, 000	Philco	031, 024, 027, 023, 026, 020,	Technics	021, 022, 023, 024
GE	033, 045, 024		043	Tenitec	024, 027, 070
Go Video	037, 051, 049, 050, 089	Philips	023, 023, 024, 066	Toshiba	003, 046, 079
Goldstar	064, 094, 091, 000, 001	Pioneer	031	Video Research	003
Gradiente	053, 045, 058, 027, 081	Proscan	045, 059, 023, 024, 031, 046,	Wards	035, 038, 067, 044, 064
Hiachi	053, 045, 058, 027, 081	Quasar	021, 022, 033, 024	Yamaha	063, 003, 004, 005
Hiachi Replay	024, 023		033, 024, 063, 036, 057, 040,	Zenith	044, 082, 064
Jensen	003	Radio Shack	027		
JVC	000, 001, 002, 003, 004, 005				
Kanwood	003, 004, 064, 005	RCA	033, 045, 058, 023, 024, 031,		
LXI	027, 064, 068, 065, 066, 063,	Realistic	046, 059, 080, 083, 085, 087		
	067		024, 063, 036, 067, 040, 027		

#### Search Codes Function :

- 1) Slide the 2-Way Mode Selector Switch to TV.
- 2) Press the VCR POWER and RETURN+ buttons simultaneously for more than three seconds, then release.
- 3) Press VCR POWER and check if the accessory responds.
- 4) If there was a response, press RETURN+. If there was no response, repeat Step 3 until there is a response. If you repeat Step 3 more than 80 times and there is still no response, use the accessory remote.





## THE ON SCREEN MENUS

### THE SYMBOLS USED IN THIS GUIDE

- ▲▼ Whenever you see up and down arrows is this book, press the MENU Up or MENU DOWN button to:
  - Move vertically in the main menu,
  - Move through a submenu,
  - Move to the next letter, number, or other choice in a submenu, or
  - Back up to correct an error, or
  - Channel Up or Down
- ◀▶ Whenever you see left and right arrows, press the MENU LEFT or MENU RIGHT button to:
  - Select the highlighted item, or
  - Select the options in a submenu, or
  - Volume Up or Down



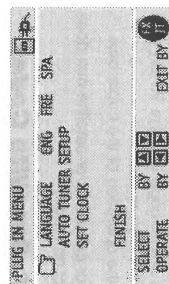
The "Press Button" means you should press that button on the remote control.



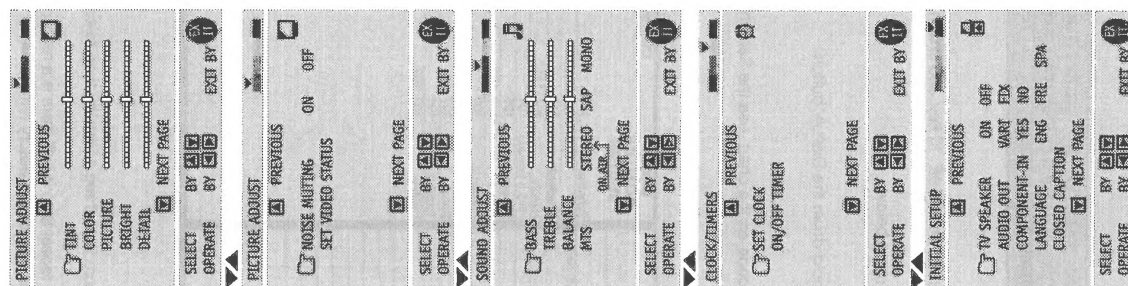
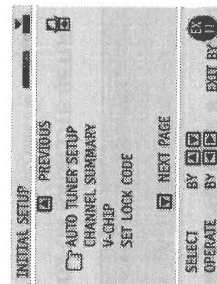
The "Helping Hand" points to the highlighted or selected item in a menu.

To use the Menu, press the Menu button and then use the ▲▼ and ◀▶ buttons to move around the menu as described above. If you continue pressing the Menu button, the display will skip to the next menu screen.

**Note:** The menu screens shown in this book are representations of the menu screens on your set, not exact replications.



The "Plug In Menu" only appears the first time the TV is plugged in.



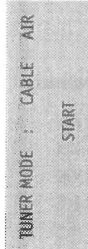
## PLUG IN MENU



### AUTO TUNER SETUP

During Auto Tuner Setup, the TV will automatically scan through all available channels and memorize the active ones so that when you scan, you do not pick up weak or noisy channels.

- ▲▼ To AUTO TUNER SETUP
- ◀▶ To operate



- ◀▶ To choose CABLE or AIR
- ▲▼ To move to START
- ◀▶ To start programming



Programming takes approximately 1 to 2 minutes

PROGRAMMING OVER!

### PLUG IN MENU

The Plug In Menu comes up automatically when you first turn on the TV after plugging it in. The Plug In Menu sets the default preferences for you for:

- The Language in which you want the onscreen displays to appear.
- The Auto Tuner Setup of channels to be included in scan.
- Set the clock to the proper time so that your timer functions will work.

### LANGUAGE

Your JVC television allows you to choose from English, French, or Spanish on-screen menus and displays.

- ▲▼ To LANGUAGE



- ◀▶ To choose the language

ENGLISH ↔ FRENCH ↔ SPANISH

**Note:** Noise Muting will not work while Auto Tuner Setup is working.



## PLUG IN MENU

### SET CLOCK

The Clock is the heart of all timer functions. The clock must be set before the timer functions work.

#### NOTE:

You must have the clock set to operate the On/Off Timer.

- ▲▲ To SET CLOCK
- ◀▶ To operate

TIME	--:--	--
START CLOCK		

- ◀▶ To set the hour (AM/PM)
- ▼ To move to minutes
- ◀▶ To set the minutes
- ▼ To move to START CLOCK when done with settings
- ◀▶ To start the clock

THANK YOU !!

### CLOCK — ON/OFF TIMER MESSAGE

If you do not set the clock but attempt to use the On/Off Timer, you will get the following message:

#### SET CLOCK

PLEASE SET CLOCK FIRST !!

TIME

--:--

START CLOCK

- ◀▶ To set the hour (AM/PM)
- ▼ To move to minutes
- ◀▶ To set the minutes
- ▼ To move to START CLOCK when done with settings
- ◀▶ To start the clock

THANK YOU !!

### FINISH

Once you have set up the items in the Plug In Menu you must select Finish.

- ▲▲ To FINISH
- ◀▶ To exit

**Note:** You can reset the preferences that you set here in the Plug In Menu via the regular JVC Menu system.



## INITIAL SETUP

### CHANNEL GUARD - LOCK

- ▲▲ To CHANNEL SUMMARY
- ◀▶ To operate

CH NO	SCAN	CH NO	SCAN
01		06	✓
02	✓	07	
03	✓	08	
04	✓	09	✓
05	✓	10	✓

- ▲▲ To the Lock column

The access code zero (0) to lock or unlock that channel

Use the CHANNEL +/- button to go to any other channel you want to lock

Exit when finished

### CHANNEL GUARD MESSAGE:

This message appears when a viewer attempts to watch a guarded channel :

THIS CHANNEL IS LOCKED BY  
CHANNEL GUARD.  
PLEASE ENTER LOCK CODE BY  
10 KEY PAD TO UNLOCK IT.  
NO. --- --

To watch a channel you have locked, enter the lock code using the 10 key pad. If the wrong lock code is entered, this message will appear:

INVALID LOCK CODE !

**Note:** See "Set Lock Code", for more information.

### CHANNEL SUMMARY

You can add or delete channels from channel scanning. You can also lock out any "unauthorized" viewers from one or up to all 125 channels.



Press the Menu Button

- ▲▲ To CHANNEL SUMMARY
- ◀▶ To operate

**Note:** Noise Muting will not work while you are in the Channel Summary menu.

### SCAN

You can manually set channels to scan that were too weak to be picked up during Auto Tuner Setup. Conversely, if a channel was too weak to receive a good picture but was picked up anyway, delete it by removing the ✓. (If you have not performed the Auto Tuner Setup described on page 15, do so now.)

CH NO	SCAN	CH NO	SCAN
01		06	✓
02	✓	07	
03	✓	08	
04	✓	09	✓
05	✓	10	✓



CHANNEL +/- to select the channel

To the SCAN column

- ◀▶ To include or delete from scan
- Exit when finished

**Note:** Channels set to scan will be marked with an ✓.

**Note:** Some cable systems experience interference from radio frequencies on Cable Channel 95. If you like, you can delete this channel from scanning by removing the ✓.

Continued above...

## INITIAL SETUP



### V-CHIP

Your TV is equipped with V-Chip Technology which enables TV Parental Guideline and Movie (MPAA) Guideline controls. V-Chip technology allows you to program your TV to receive, or not receive, programs based on content according to the guidelines.

When a viewer attempts to watch a blocked channel this message appears:

THIS PROGRAMMING EXCEEDS  
YOUR RATING LIMITS.  
PLEASE ENTER LOCK CODE BY  
10 KEY PAD TO UNLOCK IT.  
NL - - - -

To watch a channel you have locked, enter the lock code using the 10 key pad.

### To set up the TV Parental Guideline Ratings...

- Press the MENU button
- To V-CHIP
- To operate (Lock icon appears)
- Press Zero to access V-Chip menu

V-CHIP ON OFF  
SET TV RATINGS  
SET MOVIE RATINGS  
UNRATED VIEW BLOCK  
FINISH

- To turn V-Chip ON or OFF
- To move to SET TV RATINGS

18 14 12 10 8 7 6 5 4 3 2 1  
V/FV S L D

### VIEWING GUIDELINES

- ☐ V/FV is for VIOLENCE / FANTASY VIOLENCE
- ☐ S stands for SEXUAL CONTENT
- ☐ L stands for strong LANGUAGE
- ☐ D stands for suggestive DIALOG

### U.S. PARENTAL RATING SYSTEMS Programs with the following Ratings are appropriate for Children.

- ☐ **TV Y is Appropriate for All Children.**  
Programs are created for very young viewers and should be suitable for all ages, including children ages 2 - 6.
- ☐ **TV Y7 is for Older Children.**  
Most parents would find such programs suitable for children 7 and above. There may exist some mild fantasy violence or comedic violence. Children should be able to discern reality from fantasy.

### Programs with the following Ratings are appropriate for the entire audience.

- ☐ **TV G stands for General Audience.**  
Most parents would find these programs suitable for all age groups. They contain little or no violence, no strong language, and little or no sexual dialog or situations.

### TV PG Parental Guidance Suggested.

May contain some, but not much, strong language, limited violence, and some suggestive sexual dialog or situations. It is recommended that parents watch these programs first, or with their children.

### TV 14 Parents Strongly Cautioned.

Programs contain some material that may be unsuitable for children under the age of 14 including possible intense violence, sexual situations, strong coarse language, or intensely suggestive dialog. Parents are cautioned against unattended viewing by children under 14.

### TV MA Mature Audiences Only.

These programs are specifically for adults and may be unsuitable for anyone under 17 years of age. TV MA programs may have extensive V, S, L, or D.

### Directions to Block Viewing:

Line up the cursor in the column (TV PG, TV G, etc.) with the content row (V/FV, S, etc.) and press the or to move the cursor to the correct location, and press or to turn the locking feature on or off. An item is locked if the icon appears instead of a "—".

**An example.** To block viewers under 14 from all shows:

Move the cursor to the top row of that column and add a lock icon. Once you've put a lock on the top row, everything in that column is automatically locked.

- To the TV 14 Column
- To turn on the lock

18 14 12 10 8 7 6 5 4 3 2 1  
V/FV S L D

- Press EXIT when done

**Note:** if you want to change the setup, move the cursor to the top column and change to "—" and then you can select individual categories to block.

### Special Notes about V-Chip:

- 1) Some programs do not have a rating signal, therefore, even if you setup V-Chip, those programs will not be locked. Parents are cautioned to preview the contents of these programs or movies.
- 2) Canadian Viewers: V-Chip function is based on specifications for the US and therefore may not work properly in Canada.

## INITIAL SETUP



### To set up Movie Ratings...

- Press the MENU button
- To V-CHIP
- To operate (Lock icon appears)
- Press Zero to access V-Chip setup options
- To SET MOVIE RATINGS
- To enter movies menu

X NR7 R R53 PG G NR  
— — — — —

### NR - Not Rated.

This is a film that has no rating. In many cases these films were imported from other countries. Other NR films may be from amateur producers who didn't intend to have their film widely released. NR (Not Rated) Programming may contain all types of programming, including children's programming, foreign programs, or adult material.

### G - General Audience.

In the opinion of the review board, these films contain nothing in the way of sexual content, violence, or language that would be unsuitable for audiences of any age.

### PG - Parental Guidance.

Parental Guidance means the movie may contain some contents such as mild violence, some brief nudity, and strong language. The contents are not deemed intense.

### PG-13 - Parents Strongly Cautioned.

For parents with children under 13, they are cautioned that the content of movies with this rating is more explicit in sexual, language, and violence content than PG.

## R Restricted.

These films contain material that is explicit in nature and is not recommended for unsupervised children under the age of 17.


## NC-17 No One Under 17.

These movies are considered what most parents would feel is too adult for their children to view and can consist of strong language, nudity, violence, and suggestive and explicit subject matters.

## X No One under 18.

Inappropriate for anyone under 18.

## Directions to Block Movie Viewing:

In order to block viewers from any or all of these sorts of contents, press the ▲ or ▼ to move the cursor to the correct location, and press ◀ or ▶ to turn the locking feature on or off. An item is locked if the  icon appears instead of a "—".

To block viewers under X and NC-17 rated from shows:

- ▲▼ To the X Column
- ▲▼ To turn on the lock



- ▲▼ To the NC-17 Column
- ▲▼ To turn on the lock



Press Exit when done

## Notes About Unrated Programs:

Unrated programming refers to any programming that does not contain a rating signal. Programming on television stations which do not broadcast ratings

signal will be in the "Unrated Programming" category.

Examples of Unrated programs:

- Emergency Bulletins
- Locally originated programming
- News
- Political Programs
- Public Service Announcements
- Religious Programs
- Sports
- Weather
- Some Commercials

**Note:** TV programs or movies that do not have rating signal will be blocked if the Unrated Category is set to LOCK.

## Directions to Block Unrated Programs:

You can block programs that are not rated.


-  Press the MENU button
- ▲▼ To V-CHIP
- ▲▼ To operate

Press ZERO to access V-CHIP setup options

- ▲▼ To UNRATED



- ▲▼ To View or Block

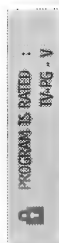
-  Press Exit when done

## Special Notes about V-Chip:

- 1) In order for V-Chip settings to take effect, V-Chip settings must be turned ON in the V-Chip menu (page 18).
- 2) You can automatically unblock all of your restrictions by turning V-Chip settings OFF in the V-Chip menu (page 18).
- 3) You can always unblock a restriction by re-entering the V-Chip menu and removing the lock icon.

## Accessing V-Chip Information:

To access Rating information about a certain program, press the V-CHIP button while viewing that program, this appears:



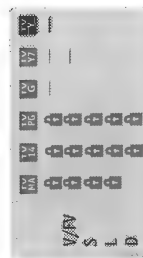
If you decide you want to block this category of viewing, press "0" while the above screen is visible, and all programs from that category will be locked.

## Example 1:

If you want to set your V-Chip settings to block all programming above TV PG:



Press 0 (zero) when TV-PG is displayed



All Programming above TV PG will be blocked!

## Example 2:

If you want to set your V-Chip settings to block all programming above a current setting such as TV PG-V (with violence):



Press 0 (zero) when TV-PG - V is displayed



All Programming above TV PG with Violence will be blocked!

## Note:

For Childrens programming you can block TV-Y and Y programs by Pressing "0" when Y is displayed during a program. Programming for audiences other than children's audiences will not be affected.

## SET LOCK CODE

The Lock Code locks and unlocks Channel Guard and V-Chip settings. Write this four digit number down and keep it safe!



Press the MENU button



To SET LOCK CODE



To operate



The padlock icon appears



ZERO (the access code is zero)



To choose the number



To move to the next place

Continue to follow these directions for all four numbers



To FINISH



To save settings and exit

**Note:** If you forget the Lock Code you can set another one this same way.

**Note:** After a power interruption you must reset the lock code.



# PICTURE ADJUST



## NOTES:

To exit the Picture Adjust menu at any time press the Exit button.

### TINT

Adjust the levels of red and green.

- Press the MENU Button
- To TINT
- To accentuate green
- To accentuate red
- To move to the next

### COLOR

Adjust both the vividness and subtlety of the color.

- Press the MENU Button
- To COLOR
- To make colors more vivid
- To subdue colors
- To move to the next

### PICTURE

Picture allows you to adjust the picture's range of black and white.

- Press the MENU Button
- To PICTURE
- To increase contrast
- To decrease contrast
- To move to the next

### BRIGHT

Adjust the degree of light and dark.

- Press the MENU Button
- To BRIGHT
- To lighten the picture
- To darken the picture
- To move to the next

### DETAIL

Adjust the level of detail in the picture.

- Press the MENU Button
- To DETAIL
- To make the picture sharper
- To make the picture smoother
- To move to the next

### NOISE MUTING

Inserts a blue screen and eliminates noise from channels that are not broadcasting or are too weak.

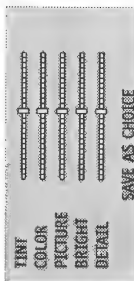
- Press the MENU Button
- To NOISE MUTING
- To turn ON/OFF

**Note:** Noise Muting will not work when you operate the Auto Tuner Setup or Channel Summary.

### SET VIDEO STATUS

Save a set of Picture Settings and access later as "Choice".

- Press the MENU Button
- To SET VIDEO STATUS
- To operate



- To operate the TINT option
- To move to the next option

Repeat the above steps to set each option.

- To SAVE AS CHOICE
  - To save settings and exit
- Note:** Access your "Choice" settings by pressing the Video Status button on the remote control.

# SOUND ADJUST



## NOTE:

MTS has no effect on normal sound broadcasts.

### MTS (Multi-Channel Television Sound)

MTS technology gives you a choice among stereo, mono, and Second Audio Programs (SAP).

- Press the MENU Button
- To MTS
- Select the mode



(The ON AIR arrow tells you if the current signal contains Stereo or SAP)

**Note:** Keep the TV in STEREO mode to get the fullest sound quality.

**Note:** SAP will allow you to hear an alternative soundtrack, if available.

**Note:** Choose MONO to reduce excess noise in a program or channel.

### BASS

The Bass level adjustment feature allows you to raise or lower the level of lower frequencies in the TV's sound.

- Press the MENU Button
- To BASS
- To emphasize bass
- To reduce bass
- To move to next

### TREBLE

The Treble level adjustment feature allows you to raise or lower the level of higher frequencies in the TV's sound.

- Press the MENU Button
- To TREBLE
- To emphasize treble
- To reduce treble
- To move to next

### BALANCE

The Balance adjustment feature allows you to center the TV's sound to your needs.

- Press the MENU Button
- To BALANCE
- To shift the speaker balance to the right
- To shift the speaker balance to the left
- To move to next

## Some Sound Advice

You can tell if a program is broadcast in stereo by the position of the ON AIR arrow in the MTS menu. Unfortunately, it is common for some cable companies to squash the transmission of stereo programs to mono because they only have mono equipment. If your TV is connected to a cable system, the sound is at the mercy of that cable company — if they broadcast in mono, you receive mono sound regardless of the original stereo programming.

Fortunately, most programs that are broadcast in stereo are aired on the major television networks. If you connect your TV to an antenna instead of cable, and set the Tuner Mode in the Auto Tuner Setup to "Air" instead of "Cable," you will be able to pick up stereo broadcasts in stereo.

2202A

**ON/OFF TIMER**

YOU tell the TV to turn on and off. Use it as an alarm to wake up, as a program reminder, or to simulate that you're home when you're out of the house.

- Press the MENU Button  
 ▲▼ To ON/OFF TIMER  
 ▲▼ To operate

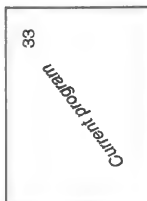
ON/OFF TIMER	7:00 PM
ON TIME	10:00 PM
OFF TIME	02
CHANNEL	EVERYDAY
MODE	ONCE
ON/OFF TIMER	YES NO
FINISH	

- ◀▶ To set the hour (AM/PM) you want the TV to turn on  
 ▼ To move to minutes  
 ▲▼ To set the minutes  
 ▼ To accept ON TIME and to move to OFF TIME (set time again)  
 ▼ To move to CHANNEL  
 ▲▼ To select channel  
 ▼ To move to MODE  
 ▲▼ Choose ONCE or EVERYDAY  
 ▼ To YES NO  
 ▲▼ Choose YES for on, NO for off  
 ▼ To FINISH  
 ▲▼ To save settings

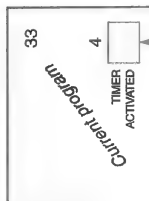
**Note:** In order for ON/OFF Timer to work, the clock must be set. After a power interruption the clock will be cancelled.

**Note:** ON/OFF Timer cannot be set to locked or guarded channels.

**Note:** A Timer Preview window (D-500 series only) will appear in the PIP, lower right corner of your screen, 7 seconds before the Timer changes the current channel to the timed program channel.

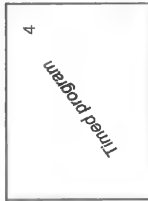


Timer activates



(Preview of ON/OFF Timer program)

7 seconds later...



Timer activates

**COMPONENT-IN**

Get the best quality video from your DVD player by using this setting and the DVD inputs at the rear of the television. Set the Video-2 input either to the component input (for DVD) "YES", or to the composite video input (for a regular VCR player) "NO".

- Press the MENU Button  
 ▲▼ To COMPONENT-IN

COMPONENT-IN	YES NO
--------------	--------

- ◀▶ To turn the input ON or OFF

- Exit when finished

**Note:** For more information on connecting a DVD player, see page 7.

**Note:** This function is to be used with DVD players only. For connecting VCR's, see page 6.

**CLOSED CAPTION**

If they are included in a program, you can view closed captions or text information.

- Press the MENU button  
 ▲▼ To CLOSED CAPTION  
 ▲▼ To operate

MODE	: OFF
CAPTION	: CC1 CC2 CC3 CC4
TEXT	: T1 T2 T3 T4
FINISH	

- ◀▶ To select CAPTION, TEXT or OFF  
 ▲▼ To CAPTION or TEXT  
 ▲▼ To select a caption (CC1 to CC4) or text channel (T1 to T4)  
 ▼ To accept that selection and move to FINISH  
 ▲▶ To exit and save settings

**NOTES:**

Regarding the operation of the Language feature, refer to page 15.

**CLOSED CAPTION NOTES:**

**Note:** If you turn the Mode to Caption or Text, that mode will automatically begin once you exit and save the settings.

**Note:** Captions are usually found on CC1 and text on T1. The other caption and text channels are workable but are for future purposes.

**Note:** If a black box covers half of the screen, text Mode is on. Select OFF to turn it off.

**Note:** Closed captioning may not correctly operate when the signal received is weak or when you are playing a video tape.



## BUTTON FUNCTIONS

### MENU

The MENU button allows you to access the onscreen menu system. Another complete discussion of these buttons and the menu system is located on page 14.

Once you press the menu button, the CHANNEL +/- (▲▼) and VOLUME +/- (◀▶) buttons work to operate the menu system.

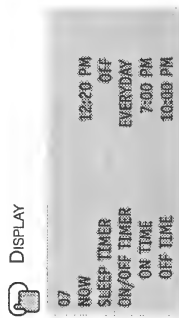
- Press (▲▼) to move up and down in the menu system.
- Press (◀▶) to operate a feature in the menu system.

### EXIT

The EXIT button lets you leave the menu system or turn off PIP when you press it.

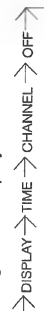
### DISPLAY

The onscreen display shows the current status of timers and inputs.



- The channel or AV input (Ch. 07)
- Current time (12:20 PM)
- Sleep Timer minutes remaining (Off)
- On/Off Timer status (Everyday, on at 7:00 PM, off at 10:00 PM)

**Note:** Each press of the DISPLAY button changes the display mode:



If you select time or channel, the time or channel (or video input) will remain on the screen.

### VIDEO STATUS

The VIDEO STATUS button lets you select the "Choice" settings of the Set Video Status menu, or reset to factory settings.

"Standard" resets the picture settings to factory standard levels.

"Choice" consists of the settings that you saved in the Set Video Status menu, page 22.

"Theater" for a film-like look to video.



### SLEEP TIMER

The Sleep Timer will turn off the TV for you in case you fall asleep. Program it to work in intervals of 15 minutes up to 180 minutes.



### SLEEP TIMER MESSAGE:

20 seconds prior to the automatic shut-off, this message will appear:



You then have 20 seconds to press the Sleep Timer button to delay turn off for another 15 minutes.

## BUTTON FUNCTIONS



### MUTING

The Muting button turns the sound off completely when you press it. Press it again to restore the volume to the previous level.

### RETURN+

There are two kinds of Return...

**Return+** — Set a "Return Channel" to return to after scanning with CHANNEL +/-.



RETURN+ and hold for 3 seconds



Scan with CHANNEL +/-



**Note:** To cancel a Return channel, press and hold Return+ for another 3 seconds until "RETURN CHANNEL CANCELLED!" appears.

**Return** — Return to the last channel viewed after moving to another channel via the 10 key pad.



Move to another channel with the 10 key pad.

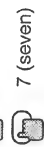
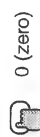


**Note:** When PIP is on, the RETURN+ button function affects only the main screen.

### NUMBER BUTTONS / 10 KEY PAD

Change channels with the 10 key pad.

For example, to move to Channel 7:



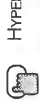
### BBE

BBE high definition audio adds natural, clear and extraordinary sound to any program.



### HYPER SURROUND

Create a deep, 3-dimensional sound effect by channeling the sound through the TV's front firing speakers.



### TV/VIDEO

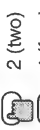
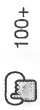
TV/VIDEO controls the TV's input mode.



### 100+

The 100+ button lets you access all channels above Channel 99.

To move to Channel 124:



### VCR BUTTONS

This remote will control your VCR. You can play, rewind and fast-forward, record, pause, stop, move channel up and down, and power on and off.

**Note:** This remote is preset with the code 000 to control a JVC VCR. For any other brand, you must set up the manufacturer's code (page 12.)

### NOTES:

For U.S.  
Licensed from  
BBE Sound, Inc.  
under  
USP 4639238,  
4482866 and  
5516572.

BBE is a  
registered  
trademark of BBE  
Sound, Inc.

For Canada.  
Licensed from  
BBE Sound, Inc.  
BBE is a  
registered

trademark of BBE  
Sound, Inc.

You can find  
another discus-  
sion of Return  
and Return+ on  
page 11

## NOTES:

Picture In Picture is available on the following models only:

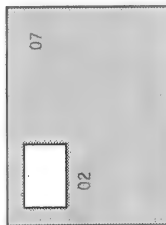
- AV-32D500
- AV-27D500

**ON/MOVE (Picture in Picture)**

PIP allows you to view two pictures simultaneously.



(PIP) On/Move



EXIT to turn PIP off

**Note:** The PIP channel and main screen channel will appear in the display momentarily right after you turn on PIP. You can leave them up permanently by pressing DISPLAY until you reach the mode.

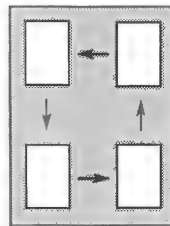
**Note:** The PIP Screen is 1/9 of the regular screen size.

Once PIP is turned on, the On/Move button operates the Move feature.

You can move the PIP window to any of the TV's four corners.



On/Move



**Note:** Each press of the On/Move button will shift the PIP window one position.

**Note:** When the PIP screen has no signal, the PIP window will be blue.

**FREEZE**

You can freeze the picture in the main screen into the PIP window.



FREEZE

**Note:** When the PIP is off, pressing FREEZE takes a snapshot of the main screen and puts it into the PIP window... great for catching those mail order addresses.

**Note:** When the PIP is on FREEZE stops the PIP picture.

**SWAP**

You can swap the PIP picture and the main picture.



SWAP

**CHANNEL +/- For PIP**  
Change the channel in the PIP window.



CH +/-

**SOURCE**

You can select the source for the PIP window.



SOURCE



**Note:** When you connect the component input (DVD) to V-2, the PIP window will be blue.

**PIP NOTES**

D-500 Series models have 2 Tuner PIP and can see two signals at once. This means you can view two channels at the same time.

In order for PIP to work, the TV must be set to "TV mode".

If you use your VCR to play a video, the VCR will automatically switch your input to VCR mode. In VCR mode, the TV sees only one signal, that of the VCR. In order to view PIP, you then need to press the TV/VCR button on your VCR remote to switch back to TV mode.

PROBLEMS	CHECK
No power	<ul style="list-style-type: none"> <li>• See if the power cord became unplugged.</li> <li>• Perhaps you have experienced a blown circuit breaker or fuse or a power outage.</li> </ul>
No picture or sound	<ul style="list-style-type: none"> <li>• The antenna could be disconnected.</li> <li>• The Input mode (TV or video) could not be set properly, refer to page 27.</li> <li>• The tuner mode (in the menu selection) could be set improperly, refer to page 15.</li> <li>• The station may be having difficulties, check to see if other channels are operating normally.</li> </ul>
Remote control is not operating	<ul style="list-style-type: none"> <li>• Check that the batteries are still working and properly installed.</li> <li>• Make sure there are no objects blocking a clear path from the remote to the TV.</li> <li>• Check that the 2-way mode selector switch is in the proper position — set to TV to view television.</li> </ul>
You cannot select a certain channel	<ul style="list-style-type: none"> <li>• Maybe you are too far from the TV, you must be within 23 feet (or 7 meters).</li> <li>• Make sure the channels are programmed. See Channel Summary, page 17.</li> <li>• Perhaps the channel is locked, select it with the 10 key pad and follow instructions.</li> </ul>
Power turns off	<ul style="list-style-type: none"> <li>• Perhaps the On/Off Timer is set, press the power button, check page 24.</li> <li>• The power was interrupted or the power cord unplugged.</li> <li>• The Sleep Timer may be set, see page 26.</li> </ul>
The clock is wrong	<ul style="list-style-type: none"> <li>• The clock needs to be reset. See page 16.</li> </ul>
PICTURE	CHECK
Poor color quality	<ul style="list-style-type: none"> <li>• Tint and color may be improperly adjusted. Check page 22.</li> <li>• Video Status mode may be set to an inappropriate setting. Check page 22.</li> </ul>
Lines or streaks across the screen	<ul style="list-style-type: none"> <li>• There could be interference from another energy consuming appliance, such as a computer, another TV or VCR. Move any other such appliances farther away from the TV.</li> </ul>
Spotted picture	<ul style="list-style-type: none"> <li>• There could be interference from a running high wattage appliance such as a hair-dryer, vacuum cleaner, or neon sign. You will have to move the antenna away from the source of the interference or change it to a coaxial cable which is less prone to interference.</li> </ul>
Double picture (Ghosts)	<ul style="list-style-type: none"> <li>• A building or airplane can reflect the original signal producing a second, delayed one. Adjust the antenna position.</li> </ul>
Snowy picture/ Image noise	<ul style="list-style-type: none"> <li>• The antenna may be damaged, disconnected or turned. Check the antenna connection, pages 6 to 7. If it is damaged, you will have to replace it.</li> </ul>
Screen is 80% black	<ul style="list-style-type: none"> <li>• Closed Caption Text Mode is on.</li> </ul>
SOUND	CHECK
Bilingual or stereo programs can't be heard	<ul style="list-style-type: none"> <li>• Make sure the MTS mode is properly set. Refer to page 23 for details on setting MTS Modes.</li> </ul>
No sound from TV speakers at all	<ul style="list-style-type: none"> <li>• TV Speakers may be turned off in the menu, see page 25.</li> </ul>
NOT A PROBLEM	DON'T WORRY ABOUT THIS. IT'S NORMAL
Static electricity	<ul style="list-style-type: none"> <li>• It is normal to feel a surge of static electricity if you brush over or touch the screen.</li> </ul>
Occasional crackling sounds	<ul style="list-style-type: none"> <li>• It is normal for the TV to emit crackling sounds when turned on or off. Unless the sound or picture become abnormal, this is fine.</li> </ul>



# AUTHORIZED SERVICE CENTERS



QUALITY **JVC** SERVICE

HOW TO LOCATE YOUR JVC SERVICE CENTER

TOLL FREE: 1 (800) 537-5722  
<http://www.jvcservice.com>

*Dear Customer;*  
 In order to receive the most satisfaction from your purchase, read the instruction booklet before operating the unit. In the event that repair is necessary, or for the address nearest your location, please refer to the factory service center list below or within the Continental United States, call 1-800-537-5722 for your authorized service. Remember to retain your Bill of Sale for Warranty Service.

— JVC

## JVC SERVICE & ENGINEERING COMPANY OF AMERICA DIVISION OF JVC AMERICAS CORP.

### FACTORY SERVICE CENTER LOCATIONS

Dear customer;

In order to receive the most satisfaction from your purchase, read this guide before operating the unit, and before calling for service make sure you check the Troubleshooting pages at the end of this book. In the event that repair is necessary, or for the address nearest you, please refer to the factory service center list below, or within the continental United States, call the toll free number above for an authorized service center. Remember to retain your bill of sale for warranty service.

107 Little Falls Road  
 Fairfield, NJ 07004-2105  
 (973) 808-9279

1500 Lakes Parkway  
 Lawrenceville, GA 30243-5857  
 (404) 339-2522

705 Enterprise Street  
 Aurora, IL 60504-8149  
 (830) 851-7855

5665 Corporate Avenue  
 Cypress, CA 90630-0024  
 (714) 229-9011

2969 Mapunapuna Place  
 Honolulu, HI 96819-2040  
 (808) 833-5828

10700 Hammerly Suite 110  
 Houston, TX 77043  
 (713) 935-9331

13 Cummings Park  
 Woburn, MA 01801  
 (781) 376-9100

8192 State Road 84  
 Davie, FL 33324  
 (954) 472-1960

890 Dubuque Avenue  
 South San Francisco, CA 94080-1804  
 (650) 871-2666

*Sophisticated electronic products may require occasional service. Just as quality is a keyword in the engineering and production of the wide array of JVC products, service is key to maintaining the high level of performance for which JVC is world famous. The JVC service and engineering organization stands behind our products.*

## NATIONAL HEADQUARTERS JVC SERVICE & ENGINEERING COMPANY OF AMERICA DIVISION OF JVC AMERICAS CORP.

1700 Valley Road  
 Wayne, New Jersey 07470

### IF YOU SHIP THE PRODUCT

Pack your JVC unit in the original carton or one of equivalent size and strength. Enclose, with the unit, a letter stating the problem or symptom that exists and also a copy of the receipt or bill of sale you received when you purchased your JVC unit. Print your home return address on the outside and inside of the carton. Send to the appropriate JVC Factory Service Center as listed above.

### Don't service it yourself.

#### CAUTION

To prevent electrical shock, do not open the cabinet. No user serviceable parts inside. Refer to qualified service personnel.

### ACCESSORIES

To purchase accessories for your JVC product, you may contact your local JVC Dealer. Or from the 48 Continental United States call toll free : 1 (800) 882-2345

# SPECIFICATIONS

MODEL	AV-32D500	AV-32D200	AV-27D500	AV-27D200
Type	Color Television			
Reception Format	NTSC system, BTSC system (Multichannel Sound)			
Reception Range	VHF 2 to 13, UHF 14 to 69 Sub Mid, Mid, Super, Hyper and Ultra bands (181 channel frequency synthesizer system)			
Power Source	AC 120V, 60Hz			
Power Consumption	133W / 1.9A	128W / 1.8A	123W / 1.8A	118W / 1.7A
Screen Size	32"/80 cm measured diagonally, full square		27"/68 cm measured diagonally, full square	
Audio Output	5.0W + 5.0W			
Speakers	5 cm x 12 cm oval x 2			
Antenna Terminal	75 ohms (VHF/UHF) terminal (F-type connector)			
External Input Jacks	Video: 1 Vp-p, 75 ohms Audio: 500 mVrms (-4 dBs), high impedance			
S-Video Input Jack	Y: 1Vp-p positive, 75 ohms (negative sync provided) C: 0.286 Vp-p (burst signal), 75 ohms			
Component Input Jack	Y: 1Vp-p positive, 75 ohms (negative sync provided) Pb/Pc: 0.7 Vp-p, 75 ohms			
Audio Output Jacks	More than 0 to 1550mVrms (+6 dBs), low impedance (400 Hz when modulated 100%)			
AV Compu Link EX Jack	3.5 mm mini jack x 1			
Dimensions (inches) (W x H x D) (cm)	33 7/8" x 27" x 21 5/8" 85.9 x 68.4 x 54.8 cm		29 5/8" x 23 1/4" x 19 1/2" 75.2 x 59.0 x 49.4 cm	
Weight (lbs.) Weight (kg.)	114.4 (lbs.) 52.0 (kg.)		78.1 (lbs.) 35.5 (kg.)	
Accessories	Remote control x 1 • AA Batteries x 2			

Specifications subject to change without notice.

**JVC COMPANY OF AMERICA**  
 DIVISION OF JVC AMERICAS CORP.  
 1700 Valley Road  
 Wayne, New Jersey 07470

**JVC**

**JVC CANADA, INC.**  
 21 Finchdene Square  
 Scarborough, Ontario  
 Canada M1X 1A7

LCT0328-001/AA  
 0186-TN-JVJ-M



# SPECIFICATIONS

Items	Contents	
	AV-27D200(US&CA)	AV-32D200 (US&CA) AV-32D200 (A US&A CA)
Dimensions (W × H × D)	29-5/8" × 23-1/4" × 19-1/2" 752mm × 590mm × 494mm	33-7/8" × 27" × 21-5/8" 859mm × 684mm × 548mm
Mass	78.1lbs / 35.5kg	114.4lbs / 52.0kg
TV System and Color system		
TV RF System	CCIR(M)	
Color System	NTSC	
Sound System	BTSC (Multi Channel Sound)	
TV Receiving Channels and Frequency		
VL Band	(02~06) 54MHz~88MHz	
VH Band	(07~13) 174MHz~216MHz	
UHF Band	(14~69) 470MHz~806MHz	
CATV Receiving Channels and Frequency		
Low Band	(02~06, A-8) by (02~06&01)	(54MHz~804MHz)
High Band	(07~13) by (07~13)	
Mid Band	(A~1) by (14~22)	
Super Band	(J~W) by (23~36)	
Hyper Band	(W+1~W+28) by (37~64)	
Ultra Band	(W+29~W+84) by (65~125)	
Sub Mid Band	(A8, A4~A1) by (01, 96~99)	
TV/CATV Total Channel	180 Channels	
Intermediate Frequency		
Video IF Carrier	45.75 MHz	
Sound IF Carrier	41.25 MHz (4.5MHz)	
Color Sub Carrier	3.58 MHz	
Power Input	120V AC, 60Hz	
Power Consumption	118W(US) / 1.7A(CA)	128W(US) / 1.8A(CA)
Picture Tube	27" (68cm) measured diagonally, Full Square	32" (80cm) measured diagonally, Full Square
High Voltage	29kV±1.3kV (at zero beam current)	31kV±1.3kV (at zero beam current)
Speaker	2" × 4-3/4" / 5 × 12cm Oval type × 2	
Audio Power Output	5W+5W	
Video / Audio Input (1 / 2)	Video(1,2) : 1Vp-p 75Ω (RCA pin jack) Audio(1,2) : 500mVrms (-4dBs), High Impedance (RCA pin jack) S-Video ( Input 1 Over ) Y : 1Vp-p (negative sync provided, when terminated with 75Ω) C : 0.286Vp-p (burst signal, when terminated with 75Ω) Component Input ( Input 2 Over ) Y : 1Vp-p (negative sync provided, when terminated with 75Ω) P <sub>B</sub> /P <sub>R</sub> : 0.7Vp-p 75Ω	
Audio Output (Variable / Fix : Selectable)	Variable : More then 0~1550mVrms (+6dBs) Low Impedance (400Hz when modulated 100%) (RCA pin jack) Fix : 500mVrms(-4dBs) Low Impedance (400Hz when modulated 100%) (RCA pin jack)	
AV Compu link EX Input	3.5mm mini jack	
Antenna terminal	75Ω (VHF/UHF) Terminal, F-Type Connector	
Remote Control Unit	RM-C342-1A (AA/R6/UM-3 battery × 2)	

**Design & specifications are subject to change without notice.**

# SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**  
The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**  
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⋈) side GND and EARTH : (⊕) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.  
If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

## 10. Isolation Check

### (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

#### (1) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.

(... Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.

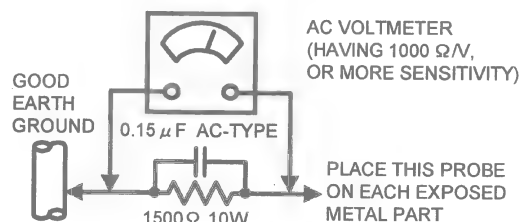
#### (2) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

#### • Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



## 11. High voltage hold down circuit check.

After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.

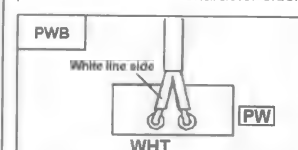
See item "How to check the high voltage hold down circuit".

This mark shows a fast operating fuse, the letters indicated below show the rating.



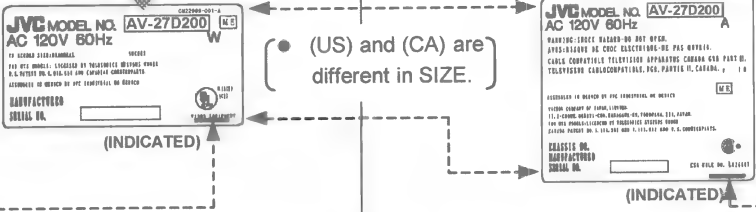
### POWER CORD REPLACEMENT WARNING.

Connecting the white line side of power cord to "WHT" character side.



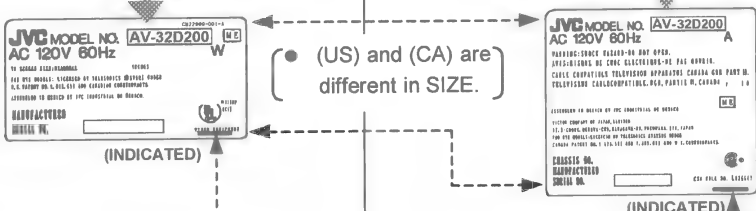
# HOW TO IDENTIFY MODELS

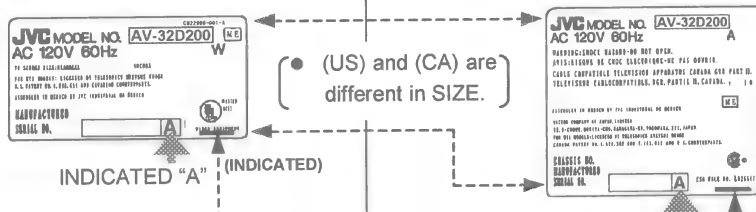
## AV-27D200 (US&CA)

⚠	MODEL	Parts name	
		AV-27D200(US)	AV-27D200(CA)
⚠	RATING LABEL	CM23034-001-A INDICATED AV-27D200	CM22999-A01-A INDICATED AV-27D200
	DIFFERENT	 <p>(US) and (CA) are different in SIZE.</p>	

## AV-32D200 (US&CA) / AV-32D200 (A US&A CA)

- For model AV-32D200 (A US&A CA), the suffix "A" is added to the serial number on the rating label.  
(The difference between AV-32D200 (A US&A CA) and AV-32D200 (US&CA) is in the PICTURE TUBE. As the result of the difference in picture tube, the MAIN PWB also differ.)

⚠	MODEL	Parts name	
		AV-32D200(US)	AV-32D200(CA)
⚠	RATING LABEL	CM23034-001-A INDICATED AV-32D200	CM22999-A01-A INDICATED AV-32D200
	DIFFERENT	 <p>(US) and (CA) are different in SIZE.</p>	

⚠	MODEL	Parts name	
		AV-32D200(A US)	AV-32D200(A CA)
⚠	RATING LABEL	CM23034-001-A INDICATED AV-32D200	CM22999-A01-A INDICATED AV-32D200
	DIFFERENT	 <p>(US) and (CA) are different in SIZE.</p>	

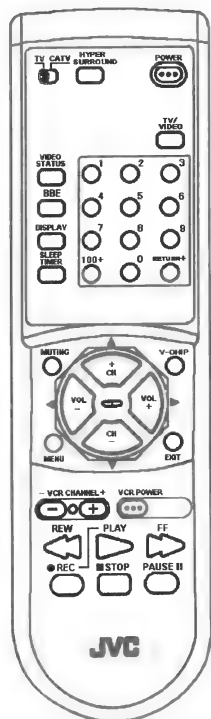


# FEATURES

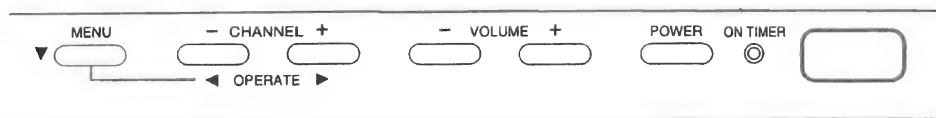
- New chassis design enables use of a main board with simplified circuitry.
- 2 LINE Digital Comb filter Improved picture quality.
- Full-square CRT (cathode ray tube) reproduces fine textured picture in every detail.
- With AV COMPU LINK EX terminal.
- Closed-caption broadcasts can be viewed.
- With AUDIO. VIDEO INPUT terminal.
- S-VIDEO input terminal for taking best advantage of Super VHS.
- Variable / Fix audio output terminal.
- I<sup>2</sup>C bus control utilizes single chip ICs.
- Because build in the BBE circuit improved the sound of conversation.
- DVD deck output can inputs to component video signal input terminal.
- The hyper-surround system marks a reproduction of the acoustic effects in a theater with strong appeal.
- Built-in V-CHIP system.

# FUNCTIONS

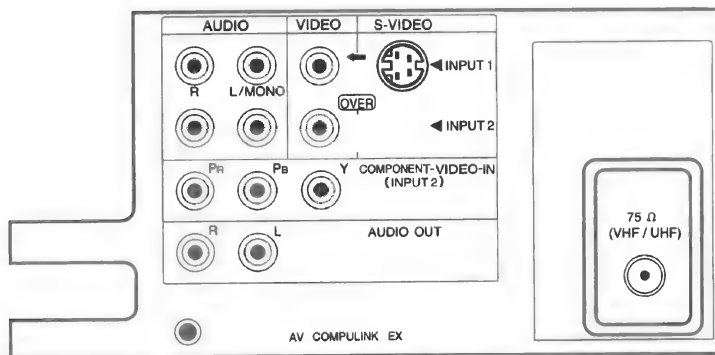
## ■ REMOTE CONTROL UNIT (RM-C342-1A)



## ■ FRONT PANEL



## ■ REAR PANEL



# SPECIFIC SERVICE INSTRUCTION

## DISASSEMBLY PROCEDURE

### REMOVE THE REAR COVER

- Unplug the power supply cord.
- 1. Remove the 12 screws marked (A) as shown in Fig.2.
- 2. Remove the rear cover toward you.

\* When reinstalling the rear cover, carefully push it inward after inserting the chassis into the rear cover groove.

### REMOVE THE CHASSIS

- After removing the rear cover.
- 1. Slightly raise the both sides of the chassis by hand and remove the 2 claws under the both sides of the chassis from the front cabinet.
- 2. Draw the chassis backward along the rail in the arrow direction marked (C) as shown in the Fig.2.  
(If necessary, take off the wire clamp, connector's etc.)

\* When conducting a check with power supplied, be sure to confirm that the CRT earth wire is connected to the CRT SOCKET PWB and the MAIN PWB.

### REMOVE THE TERMINAL BOARD

- After removing the rear cover.
- 1. Remove the 4 screws marked (D) as shown in Fig.2.
- 2. After removing the claw marked (E) in the direction of arrow mark as shown in Fig.1.
- 3. When you pull out the TERMINAL BOARD in the direction of arrow marked (F) as shown in Fig.1, it can be removed.
- 4. Thus the connector should be securely inserted when the TERMINAL BOARD is installed again.

### REMOVE THE FRONT CONTROL PW BOARD

- After removing the rear cover and chassis.
- 1. Remove the 3 screws marked (G) as shown in Fig.2.
- 2. Then remove the FRONT CONTROL PWB.

### REMOVE THE SPEAKER

- After removing the rear cover and chassis.
- 1. Remove the 2 screws marked (H) as shown in Fig.2.
- 2. Follow the same steps when removing the other hand speaker.

### CHECKING THE MAIN PW BOARD

1. To check the backside of the MAIN PW Board.
  - (1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
  - (2) Erect the chassis vertically so that you can easily check the backside of the MAIN PW Board.

#### [CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PWB.
- Before turning on power, make sure that the CRT earth wire and other connectors are properly connected.

### WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together.  
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

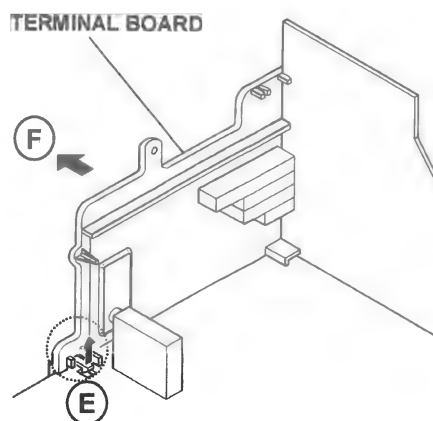


Fig. 1

[AV-27D200]

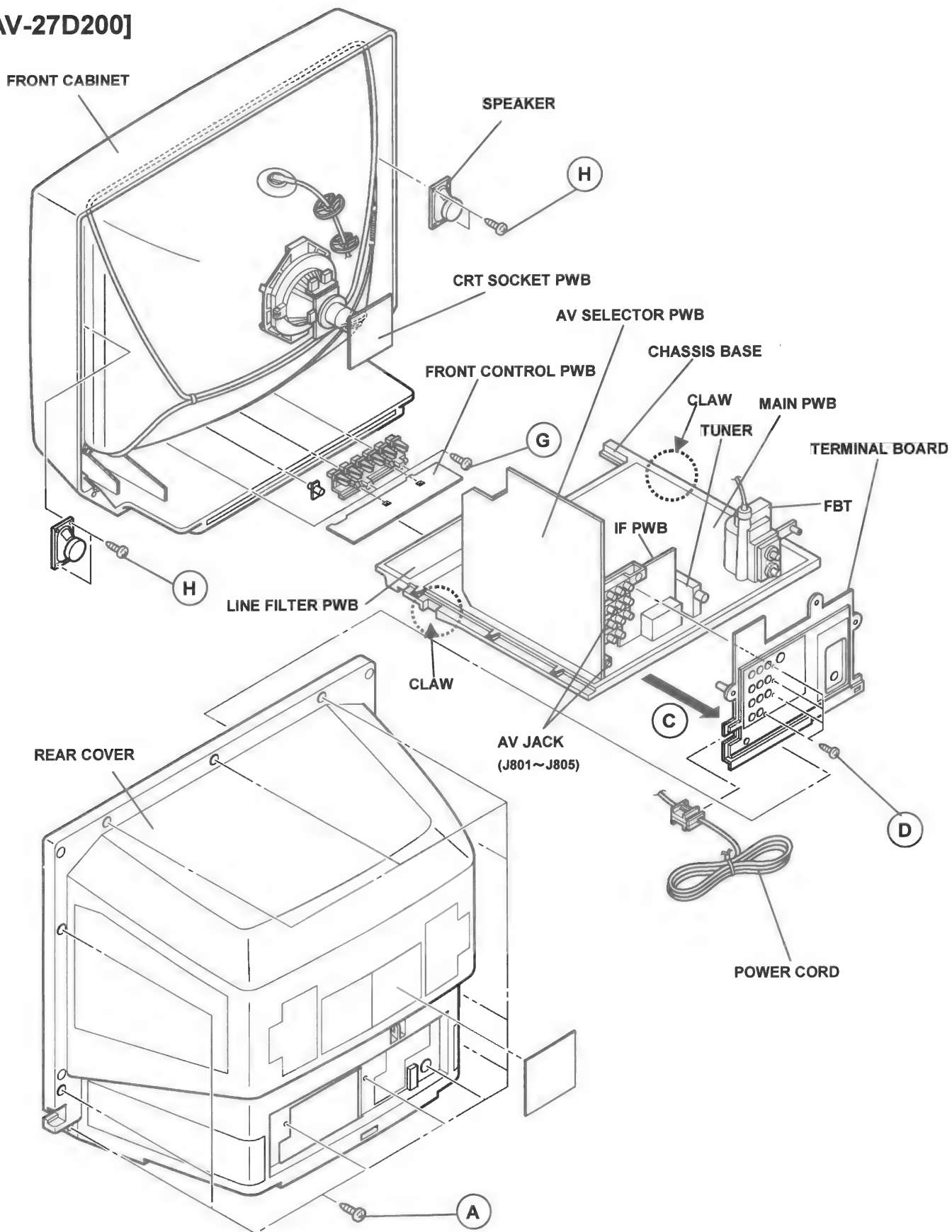


Fig.2

## [AV-32D200]

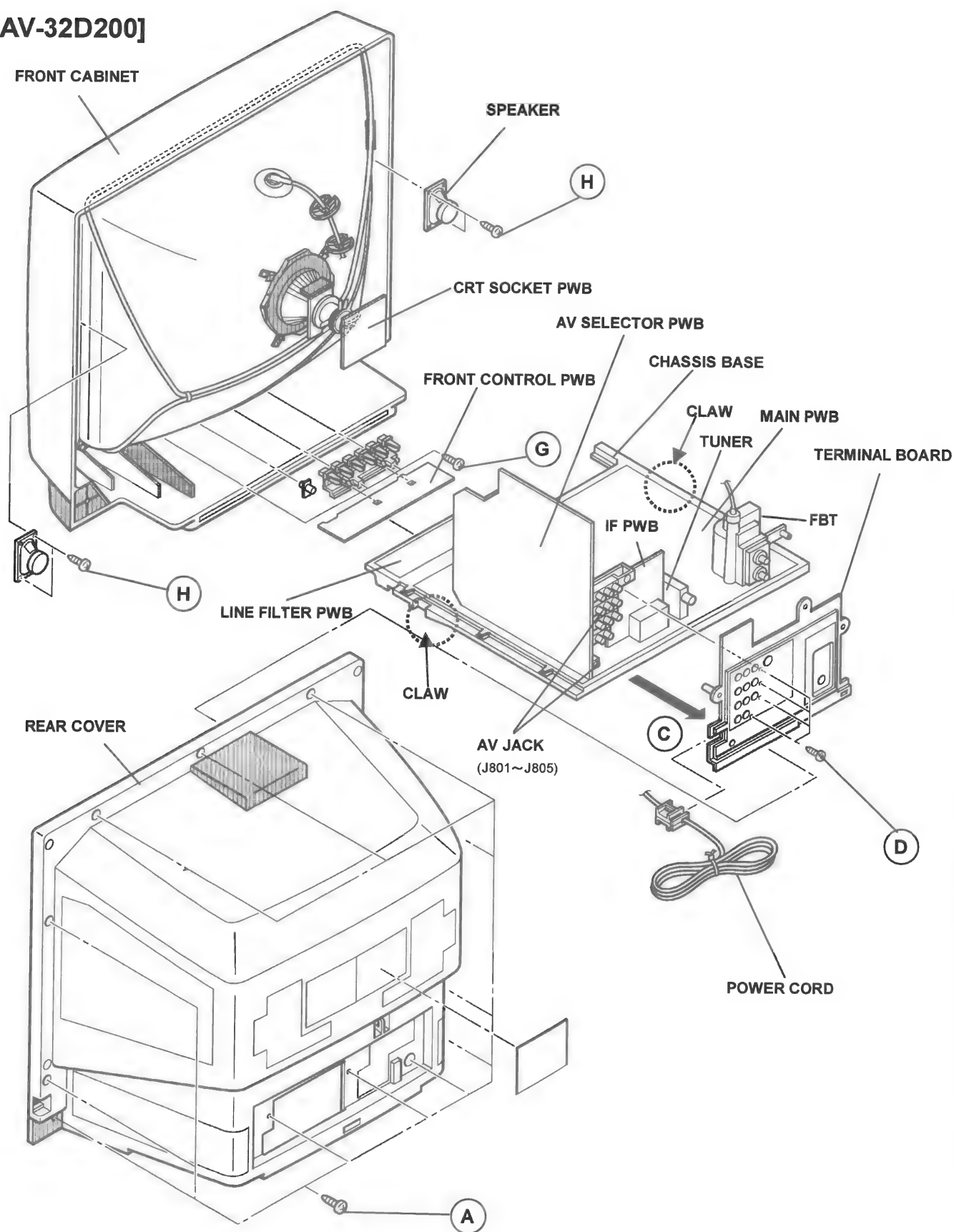


Fig.2



## REMOVE THE CRT (PICTURE TUBE)

- \* Replacement of the CRT should be performed by 2 or more persons.
- After removing the rear cover, chassis etc.,
- 1. Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig.3).
- 2. While keeping the surface of CRT down, mount the TV set on the CRT change table balanced well as shown in Fig.4.
- 3. Remove 4 screws marked by arrows with a box type screwdriver as shown in Fig.5.
- Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.
- 4. After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front surface of the cabinet) shown in Fig.5.
- The CRT should be assembled according to the opposite sequence of its dismantling steps.
- \* The CRT change table should preferably be smaller than the CRT surface, and its height be about 35cm.

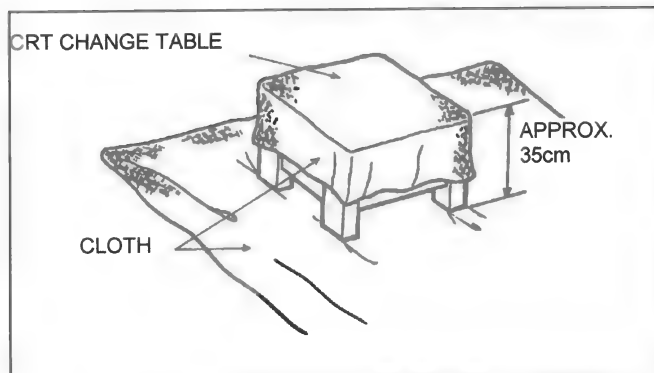


Fig. 3

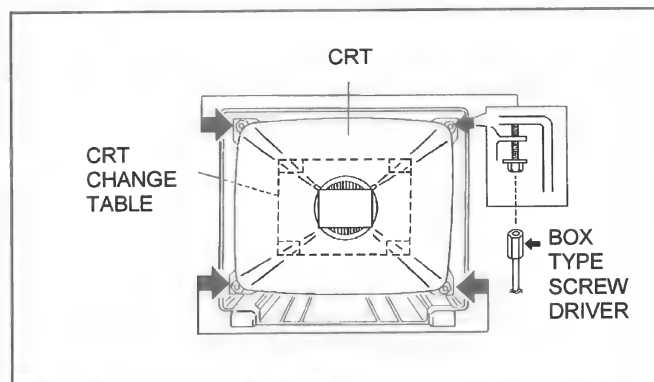


Fig. 4

## COATING OF SILICON GREASE FOR ELECTRICAL INSULATION ON THE CRT ANODE CAP SECTION.

- Subsequent to replacement of the CRT and HV transformer or repair of the anode cap, etc. by dismantling them, be sure to coat silicon grease for electrical insulation as shown in Fig.6. Wipe around the anode button with clean and dry cloth. (Fig.6) Coat silicon grease on the section around the anode button. At this time, take care so that any silicon greases do not stick to the anode button. (Fig.7)

★ Silicon grease product No. KS - 650N

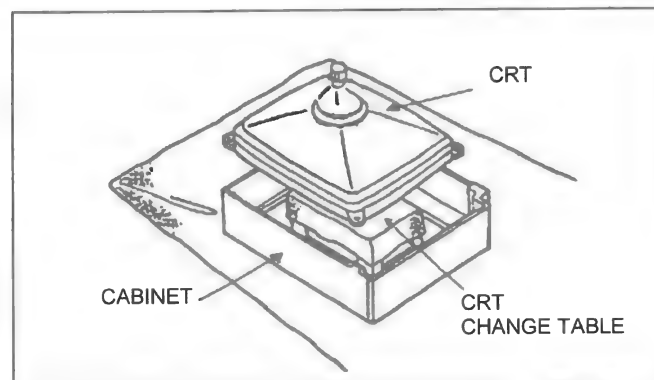


Fig. 5

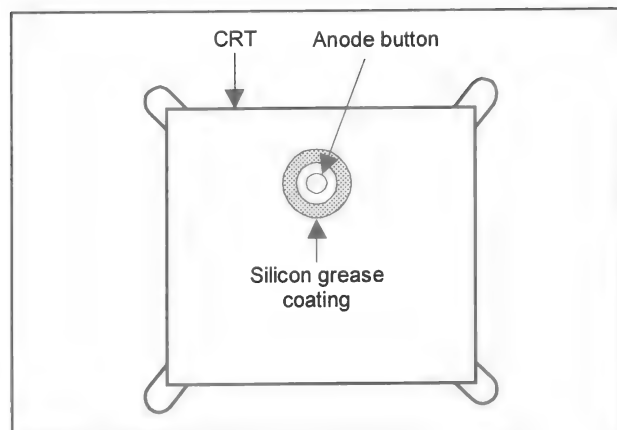


Fig. 6

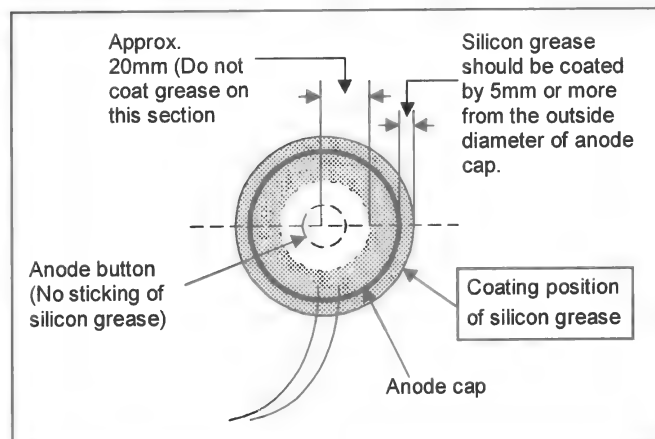


Fig. 7

# MEMORY IC REPLACEMENT

## 1. Memory IC

This model uses a memory IC.

This memory IC stores data for proper operation of the video and deflection circuits.

When replacing, be sure to use an IC containing this (initial value) data.

## 2. Memory IC replacement procedure

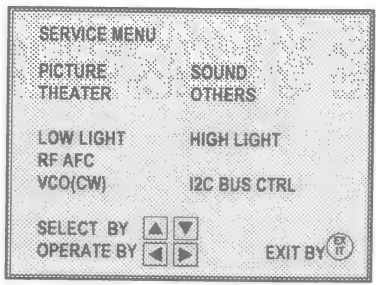
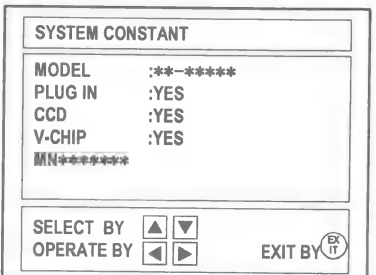
Procedure	Screen display
<b>(1) Power off</b> Switch off the power and disconnect the power cord from the outlet.	
<b>(2) Replace the memory IC</b> Initial value must be entered into the new IC.	
<b>(3) Power on</b> Connect the power cord to the outlet and switch on the power.	
<b>(4) System constant check and setting</b> <ol style="list-style-type: none"> <li>1) Press the SLEEP TIMER key and set SLEEP TIMER for 「0 min」.</li> <li>2) Before disappear the display of SLEEP TIMER settings, simultaneously press the DISPLAY key and VIDEO STATUS key of the remote control unit.</li> <li>3) The SERVICE MENU screen of Fig.1 is displayed.</li> <li>4) While the SERVICE MENU is displayed, again simultaneously press the DISPLAY and VIDEO STATUS keys to display the SYSTEM CONSTANT screen in Fig.2.</li> <li>5) Refer to the SYSTEM CONSTANT table and check the setting items. Where these differ, select the setting item with the MENU UP/DOWN key and adjust the setting with the MENU LEFT/RIGHT keys. (The letters of the selected item are displayed in yellow.)</li> <li>6) After adjusting, release the MENU LEFT/RIGHT key to store the setting value.</li> <li>7) Press the EXIT key twice to return the normal screen.</li> </ol>	<div style="text-align: center;">  <p>Fig.1</p> </div> <div style="text-align: center;">  <p>Fig.2</p> </div>
<b>(5) Receive channel setting</b> Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.	
<b>(6) User settings</b> Check the user setting items according to Table 2. Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.	
<b>(7) SERVICE MENU setting</b> Verify what to set in the SERVICE MENU, and set whatever is necessary. (Fig.1) Refer to the SERVICE ADJUSTMENT for setting.	

TABLE 1 (System Constant setting)

Setting item	Setting constant	Setting value	
		AV-27D200(US&CA)	AV-32D200 (US&CA)/(A US&A CA)
MODEL		AV-27D200	AV-32D200
PLUG IN		YES	
CCD		YES	
V-CHIP		YES	

TABLE 2 (User setting)

Setting item	Setting value	Setting item	Setting value
<b>1. Use remote controller keys</b>			
POWER CHANNEL VOLUME TV/VIDEO CLOSED CAPTION HYPER SURROUND BBE	OFF CH-02 Proper sound volume TV OFF(CC1/T1/BLACK) OFF ON	DISPLAY VIDEO STATUS SLEEP TIMER	OFF STANDARD 0
<b>2. Settings of MENU</b>			
<b>PICTURE ADJUST</b> TINT COLOR PICTURE BRIGHT DETAIL NOISE MUTING SET VIDEO STATUS	CENTER CENTER CENTER CENTER CENTER ON ALL CENTER	<b>INITIAL SETUP</b> TV SPEAKER AUDIO OUT COMPONENT-IN LANGUAGE CLOSED CAPTION  AUTO TUNER SET UP CHANNEL SUMMARY V-CHIP  SET LOCK CODE	ON FIX NO ENG CAPTION : CC1 TEXT : T1 TUNER MODE : AIR Unnecessary to set OFF SET TV RATINGS : ALL CLEAR SET MOVIE RATINGS : ALL CLEAR UNRATED : VIEW  Unnecessary to set
<b>SOUND ADJUST</b> BASS TREBLE BALANCE MTS	CENTER CENTER CENTER STEREO		
<b>CLOCK / TIMERS</b> SET CLOCK ON/OFF TIMER	Unnecessary to set NO		

# SERVICE ADJUSTMENTS

## ADJUSTMENT PREPARATION:

1. You can make the necessary adjustments for this unit with either the remote control unit or with the adjustment instrument and parts as given below.
2. Adjustment with the remote control unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.
3. Make sure that AC power is turned on correctly.
4. Turn on the power for the set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts, which are not specified in the list for this adjustment-variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.

Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.

VIDEO STATUS	STANDARD
HYPER SURROUND	OFF
TINT, COLOR, PICTURE BRIGHT, DETAIL	CENTER
BASS, TREBLE, BALANCE	CENTER

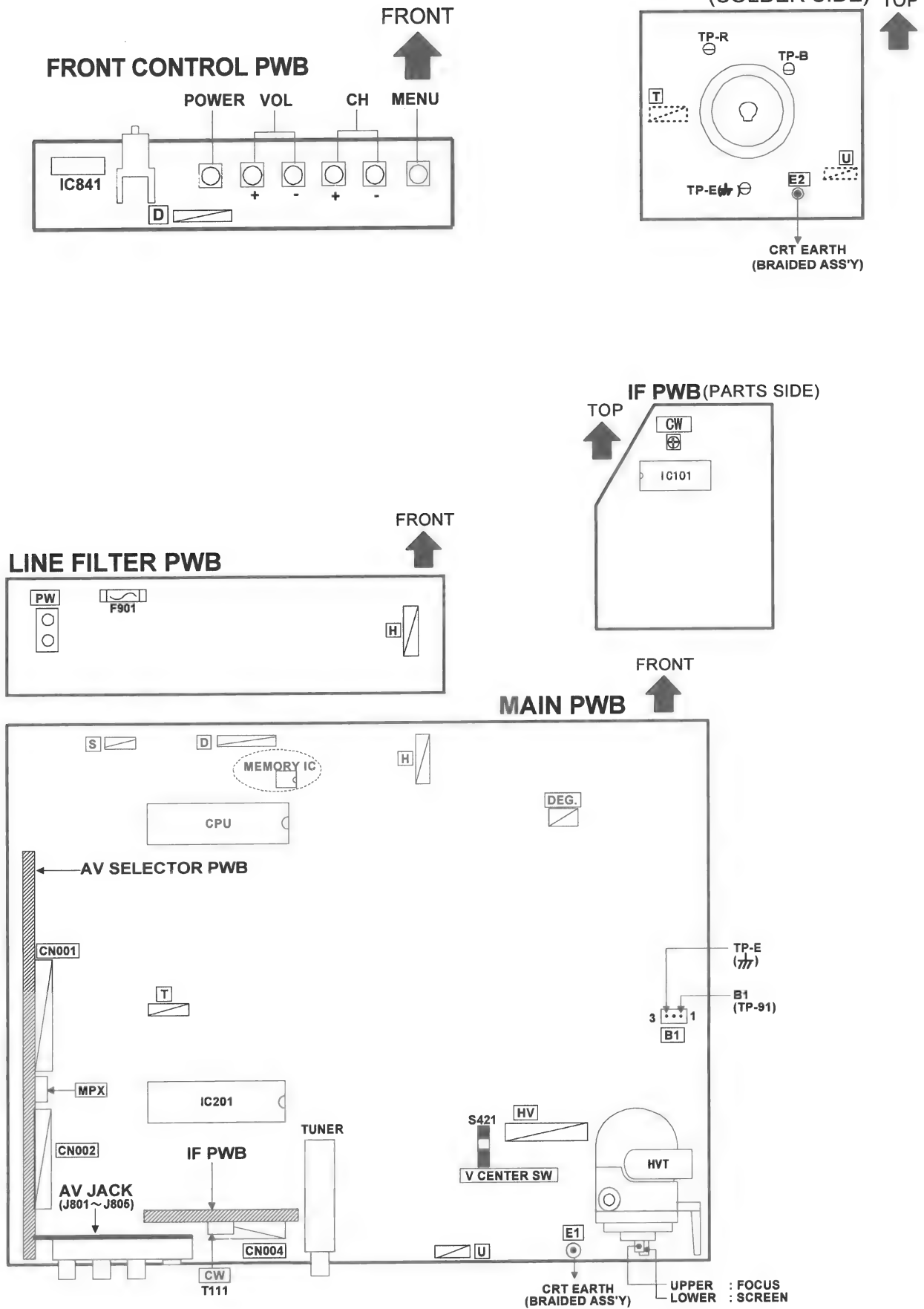
## MEASURING INSTRUMENT

1. DC voltmeter(or digital voltmeter)
2. Oscilloscope
3. Signal generator ( Pattern generator ) [NTSC]
4. Remote control unit
5. TV audio multiplex signal generator
6. Frequency counter

## ADJUSTMENT ITEMS

- Check of B1 POWER SUPPLY
- IF VCO adjustment
- RF AGC adjustment
- FOCUS adjustment
- DEFLECTION adjustment
  - V. CENTER, V. SIZE adjustment
  - H. POSITION, H SIZE, SIDE PIN adjustment
- VIDEO / CHROMA adjustment
  - WHITE BALANCE (Low light) adjustment
  - WHITE BALANCE (High light) adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment
  - DEMODULATION RATIO adjustment
- MTS circuit adjustment
  - INPUT LEVEL adjustment
  - STEREO VCO adjustment
  - SAP VCO adjustment
  - FILTER check
  - SEPARATION adjustment

## ADJUSTMENT LOCATIONS



## BASIC OPERATION OF SERVICE MENU

### 1. Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

### 2. In general, basic setting (adjustments) items or verifications are performed in the SERVICE MENU.

- (1) PICTURE ..... This set the setting values (adjustment values) of the VIDEO/CHROMA and DEFLECTION circuits.
- (2) SOUND ..... This set the setting values (adjustment values) of the AUDIO circuit.
- (3) THEATER ..... This is used when the THEATER MODE is adjusted.
- (4) OTHERS ..... This is used when the OTHERS MODE is adjusted.
- (5) LOW LIGHT ..... This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
- (6) HIGH LIGHT ..... This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
- (7) RF AFC ..... This is used when the RF AFC MODE is verified. **[Do not adjust]**
- (8) VCO (CW) ..... This is used when the IF VCO is adjusted.
- (9) I2C BUS CTRL ..... This is used when ON/OFF of the I2C BUS CTRL is set. **[Fixed ON]**

### 3. Basic Operations of the SERVICE MENU

#### (1) How to enter the SERVICE MENU.

Press the SLEEP TIMER key and set the SLEEP TIMER for 10 MIN.

Then press the DISPLAY key and VIDEO STATUS key of the remote control unit at the same time to enter the SERVICE MENU screen

① shown in figure page later.

#### (2) SERVICE MENU screen selection

Press the UP / DOWN key of the MENU to select any of the following items.

(The letters of the selected items are displayed in yellow.)

- PICTURE
- SOUND
- THEATER
- OTHERS
- LOW LIGHT
- HIGH LIGHT
- RF AFC
- VCO (CW)
- I2C BUS CTRL

#### (3) Enter the any setting ( adjustment ) mode

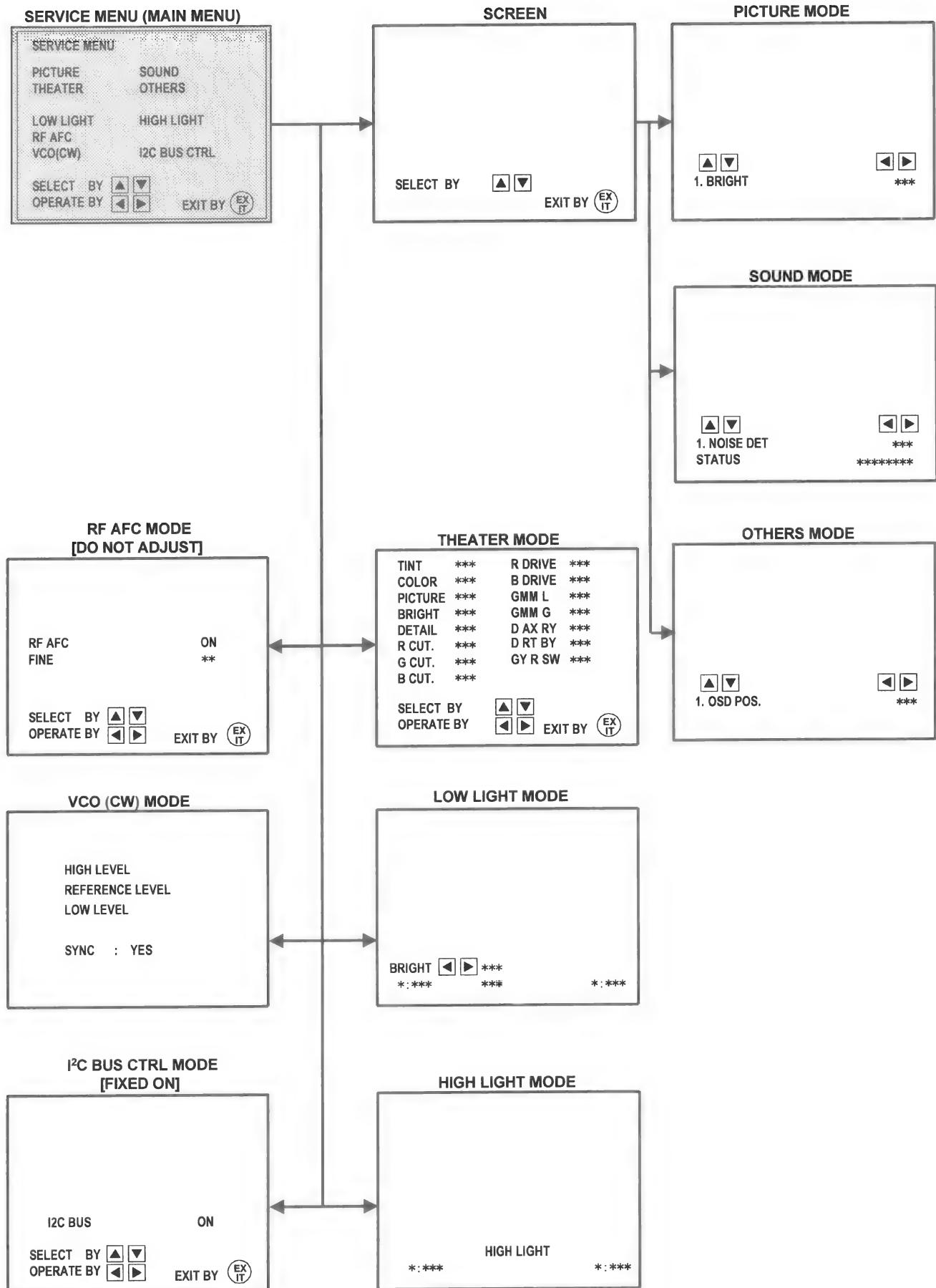
##### ● PICTURE, SOUND and OTHERS mode

- 1) If select any of PICTURE, SOUND or OTHERS items, and the LEFT / RIGHT key is pressed from SERVICE MENU ( MAIN MENU ), the screen will be displayed as shown in figure page later.
- 2) Then the UP / DOWN key is pressed, the PICTURE mode screen or the SOUND mode screen or the OTHERS mode screen is displayed, and the PICTURE, SOUND or OTHERS setting can be performed.

##### ● THEATER, LOW LIGHT, HIGH LIGHT, RF AFC, VCO (CW) and I2C BUS CTRL mode

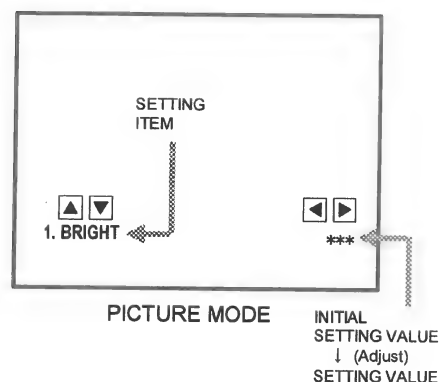
- 1) If select any of THEATER / LOW LIGHT / HIGH LIGHT / RF AFC / VCO (CW) / I2C BUS CTRL items, and the LEFT / RIGHT key is pressed from SERVICE MENU ( MAIN MENU ), the each screens will be displayed as shown in figure page later.
- 2) Then the settings or verifications can be performed.





### (3) Setting method

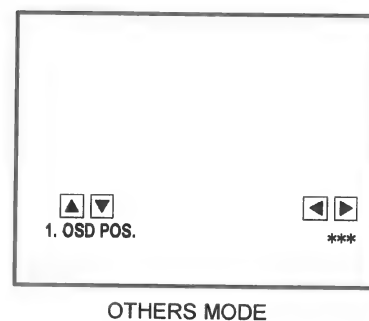
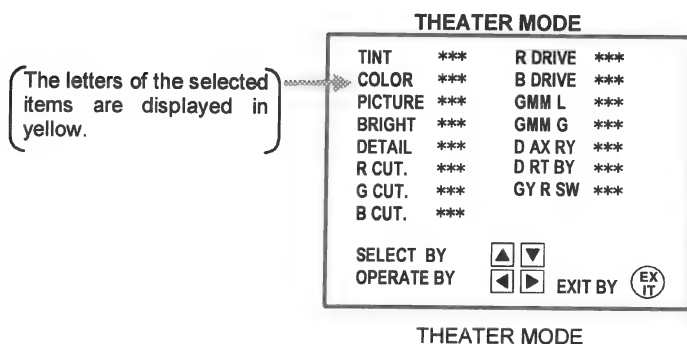
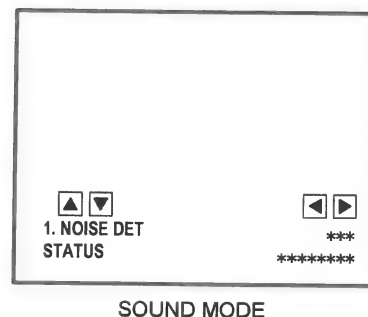
- 1) UP / DOWN key of the MENU  
Select the SETTING ITEM.
- 2) LEFT / RIGHT key of the MENU  
Setting (adjust) the SETTING VALUE of the SETTING ITEM.  
When the key is released the SETTING VALUE will be stored (memorized).
- 3) EXIT key  
Returns to the previous screen.



### (4) Releasing SERVICE MENU

- 1) After returning to the SERVICE MENU upon completion of the setting (adjustment) work, press the EXIT key again.

- ★ The settings for LOW LIGHT and HIGH LIGHT are described in the WHITE BALANCE page of ADJUSTMENT.
- ★ The setting for VCO (CW) are described in the IF VCO page of ADJUSTMENT.



## INITIAL SETTING VALUE OF SERVICE MENU

1. Adjustment of the SERVICE MENU is made on the basis of the initial setting values; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.
2. Do not change the initial setting values of the setting (adjustment) items not listed in "ADJUSTMENT".

No	Setting (Adjustment) item	Variable range	Initial setting value		
			AV-32D200	AV-32D200(A)	AV-27D200
1.	BRIGHT	0~255	127	127	127
2.	PICTURE	0~127	85	63	63
3.	COLOR	0~127	63	63	63
4.	TINT	0~127	63	63	63
5.	TV DETAIL	0~127	31	31	31
6.	EXT BRIGHT	±25	±0	±0	±0
7.	EXT PICT.	±25	±0	±0	±0
8.	EXT COLOR	±25	±0	±0	±0
9.	EXT TINT	±25	±0	±0	±0
10.	EXT DETAIL	0~127	63	63	63
11.	CMP BRIGHT	±25	±0	±0	±0
12.	CMP PICT.	±25	±0	±0	±0
13.	CMP COLOR	±25	±0	±0	±0
14.	CMP TINT	±25	±0	±0	±0
15.	CMP DETAIL	0~127	63	63	63
16.	TV APA DL	0 / 1	0	0	0
17.	EXT APA DL	0 / 1	0	0	0
18.	CMP APA DL	0 / 1	0	0	0
19.	DC TRAIN	0 / 1	1	1	1
20.	COLOR TRCK	0 / 1	0	0	0
21.	TV PR/OVR	0~7	7	7	7
22.	EXT PR/OVR	0~7	6	6	6
23.	CMP PR/OVR	0~7	6	6	6
24.	B ST GAIN	0~15	3	3	3
25.	W GMM LVL	0~15	4	4	4
26.	W GMM GAIN	0~15	5	5	5
27.	B ST SL PS	0~15	2	2	2
28.	W CHARA CR	0~15	3	3	3
29.	W CHARA SL	0~31	9	9	9
30.	DEMO AX RY	0~31	17	17	17
31.	DEMO RT BY	0~63	31	31	31
32.	GY RT SW	0~3	2	2	2
33.	CMP D AX R	0~31	17	17	17
34.	CMP D RT B	0~63	23	23	23
35.	CMP GY SW	0~3	2	2	2
36.	CMP R CUT	±50	±0	±0	±0
37.	CMP G CUT	±50	±0	±0	±0
38.	CMP B CUT	±50	±0	±0	±0
39.	CMP R DRV	±99	±0	±0	±0
40.	CMP B DRV	±99	±0	±0	±0

No	Setting (Adjustment) item	Variable range	Initial setting value		
			AV-32D200	AV-32D200(A)	AV-27D200
41.	V SIZE	0~127	33	33	47
42.	V S CR	0~63	20	20	10
43.	V LIN	0~63	50	50	50
44.	H POSI	0~63	11	11	16
45.	H SIZE	0~63	41	41	29
46.	SIDE PIN	0~63	23	23	23
47.	TRAPEZ	0~63	39	39	41
48.	EW COR TOP	0~125	0	0	0
49.	EW COR BTM	0~125	3	3	5
50.	BLK SW	0/1	0	0	0
51.	TV AFC1	0~3	2	2	2
52.	EXT AFC1	0~3	2	2	2
53.	CUT OFFSET	0~127	63	63	63
54.	DRV OFFSET	0~63	31	31	31
55.	AGC ADJ	0~127	65	65	65

● SOUND MODE

No	Setting (Adjustment) item	Variable range	Initial setting value	
			AV-32D200 / (A)	AV-27D200
1.	NOISE DET.	0 / 1	1	1
2.	IN LEVEL	0~63	15	15
3.	FH MONITOR	0 / 1	0	0
4.	STEREO VCO	0~63	30	30
5.	PILOT CAN.	0 / 1	0	0
6.	FILTER	0~63	30	30
7.	LOW SEP.	0~63	28	28
8.	HI SEP.	0~63	25	25
9.	5FH MON.	0 / 1	0	0
10.	SAP VCO	0~63	27	27
11.	IN GAIN	0 / 1	0	0
12.	FIL. OFFSET	0~10	0	0
13.	BBE BASS	±15	-1	-1
14.	BBE TRE	±15	-1	-1

● THEATER MODE

No	Setting (Adjustment) item	Variable range	Initial setting value
1.	TINT	±20	±0
2.	COLOR	±20	-7
3.	PICTURE	±20	-15
4.	BRIGHT	±20	±0
5.	DETAIL	±15	-12
6.	R CUT	±10	±0
7.	G CUT	±10	±0
8.	B CUT	±10	±0
9.	R DRIVE	-99~+50	+50
10.	B DRIVE	-99~+50	-35
11.	GMM L	±15	±0
12.	GMM G	±15	±0
13.	D AX RY	±31	±10
14.	D RT BY	±63	±0
15.	GY RT SW	±3	-1

● OTHERS MODE

No	Setting (Adjustment) item	Variable range	Initial setting value	
			AV-32D200	AV-27D200
1.	OSD POS.	0~7	2	2
2.	CCD POS.	0~15	3	3
3.	EOSEL	0 / 1	1	1
4.	MENU COLOR	-30~0	-10	-10
5.	MENU PICT.	-30~0	-10	-10
6.	MENU BRI.	-30~0	-10	-10

● LOW LIGHT MODE

No	Setting (Adjustment) item	Variable range	Initial setting value
1.	R CUTOFF	(0~255) × 4	80
2.	R CUT SW	0~3	1
3.	G CUTOFF	0~255	50
4.	B CUTOFF	(0~255) × 4	80
5.	B CUT SW	0~3	1

● HIGH LIGHT MODE

No	Setting (Adjustment) item	Variable range	Initial setting value
1.	R DRIVE	(0~127) × 4	80
2.	R DRV SW	0 / 1	0
3.	B DRIVE	(0~127) × 2	80
4.	B DRV SW	0 / 1	0

● RF AFC MODE

Setting (Adjustment) item	Variable range	Initial setting value
RF AFC FINE	ON/OFF -77~+77	ON ± × × <span style="border: 1px solid black; padding: 2px;">DO NOT ADJUST</span>

● I2C BUS CTRL MODE

Setting (Adjustment) item	Variable range	Initial setting value
I2C BUS	ON/OFF	[Fixed ON]

## REPLACEMENT OF CHIP COMPONENT

### ■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

### ■ SOLDERING IRON

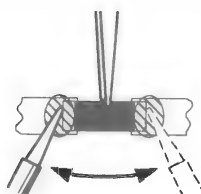
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

### ■ REPLACEMENT STEPS

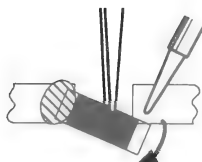
#### 1. How to remove Chip parts

##### ◆ Resistors, capacitors, etc

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

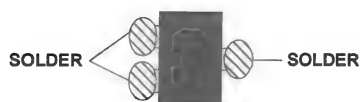


- (2) Shift with tweezers and remove the chip part.



##### ◆ Transistors, diodes, variable resistors, etc

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

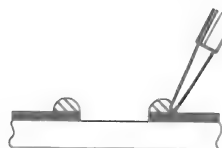


*Note : After removing the part, remove remaining solder from the pattern.*

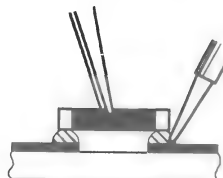
#### 2. How to install Chip parts

##### ◆ Resistors, capacitors, etc

- (1) Apply solder to the pattern as indicated in the figure.

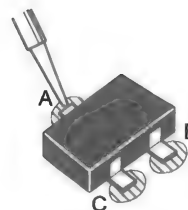


- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

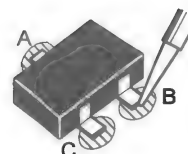


##### ◆ Transistors, diodes, variable resistors, etc

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead A as indicated in the figure.



- (4) Then solder leads B and C.





## ■ ADJUSTMENTS

### B1 POWER SUPPLY

Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 POWER SUPPLY	DC Voltmeter	B1 ( [B1] Connector [1] pin) (TP-91)  TP-E(↗) ( [B1] Connector [3] pin)		<ol style="list-style-type: none"> <li>1. Receive the black-and-white signal. (color off)</li> <li>2. Connect the DC voltmeter to [B1] connector [1] pin (TP-91) and TP-E(↗) (B1 connector [3] pin).</li> <li>3. Confirm that the voltage is <math>DC134V \pm 2V</math>.</li> </ol>

### ADJUSTMENT OF IF. VCO

Item	Measuring instrument	Test point	Adjustment part	Description
IF VCO adjustment	Signal generator		CW TRANSF. [IF PWB]	<ul style="list-style-type: none"> <li>● Under normal conditions, no adjustment is required.</li> </ul> <ol style="list-style-type: none"> <li>1. Receive the NTSC broadcast. (Use channels without offset frequency).</li> <li>2. Select the VCO (CW) mode from the SERVICE MENU.</li> <li>3. Confirm that the color change from 「HIGH LEVEL」 to 「LOW LEVEL」 by CW transf., and check the 「SYNC : YES」.</li> <li>4. Adjust until 「REFERENCE LEVEL」 mark turns yellow. And then confirm that the 「SYNC : YES」 again.</li> </ol>

HIGH LEVEL  
REFERENCE LEVEL ← YELLOW  
LOW LEVEL

SYNC : YES

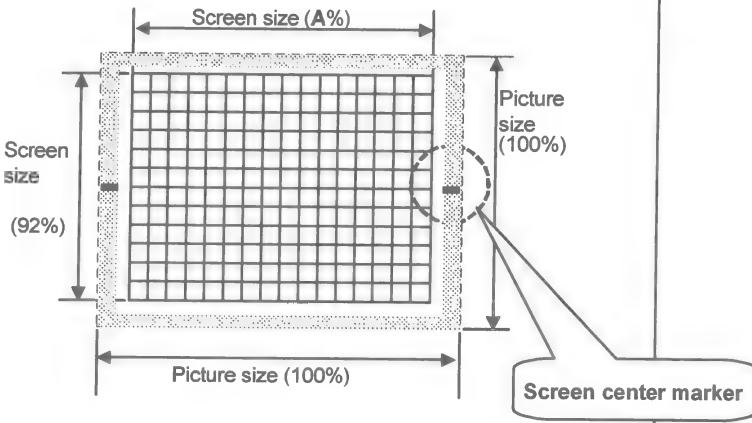
### ADJUSTMENT OF RF AGC

Item	Measuring instrument	Test point	Adjustment part	Description
RF. AGC adjustment			No.55 AGC ADJ	<ol style="list-style-type: none"> <li>1. Receive the broadcast.</li> <li>2. Select No.55 AGC ADJ of the PICTURE MODE.</li> <li>3. Press the MUTING key and turn off color.</li> <li>4. With the MENU LEFT key, let down the value to appear the noise on the screen picture.</li> <li>5. Then increase the value not to see the noise on the screen ( at that time, not to increase the value too much).</li> <li>6. Change to other channels and make sure that there is no irregularity.</li> <li>7. Press the MUTING key and get color out.</li> </ol>

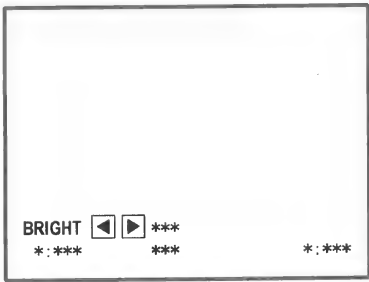
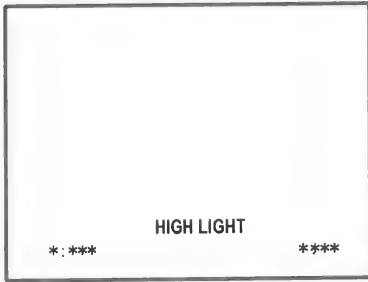
### ADJUSTMENT OF FOCUS

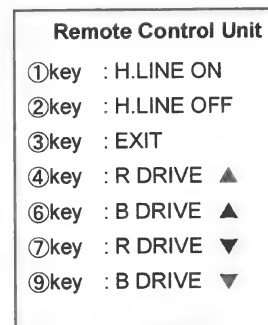
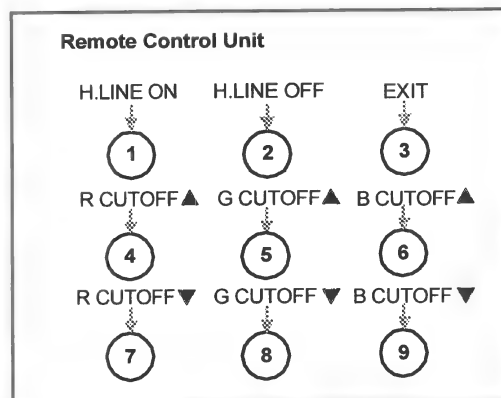
Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS adjustment	Signal generator		FOCUS VR [built-in HVT]	<ol style="list-style-type: none"> <li>1. Receive the cross-hatch signal.</li> <li>2. While looking at the screen, adjust the FOCUS VR to the vertical and horizontal lines will be clear and in fine detail.</li> <li>3. Make sure that the picture is in focus even when the screen gets darkened.</li> </ol>

# ADJUSTMENT OF DEFLECTION CIRCUIT

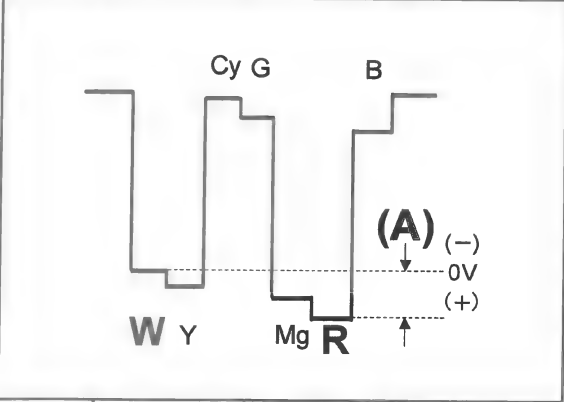
Item	Measuring instrument	Test point	Adjustment part	Description									
V. CENTER V. SIZE adjustment	Signal generator		No.41 V SIZE  V. CENTER SW [MAIN PWB]	<div>1. Receive the cross-hatch signal.</div> <div>2. Adjust the V.CENTER SW so that the horizontal line of the vertical center on the cross-hatch screen is agreement with the screen center marker. The screen center marker is positioned at both side of the screen vertical center.</div> <div>3. Adjust the vertical screen size of the screen top to 92% with the No.41 V.SIZE of the PICTURE SERVICE ( Bottom of screen is to be located within the 85%~95% range ).</div>									
<div></div>													
H. POSITION H. SIZE SIDE PIN adjustment	Signal generator		No.44 H POSITION No.45 H SIZE No.46 SIDE PIN	<div>1. Receive the cross-hatch signal.</div> <div>2. Adjust H. POSITION of left-right center with No.44 H POSI.</div> <div>3. With No.45 H SIZE, adjust the screen horizontal size to A% as shown in table bellow and figure above.</div> <div>4. Adjust the vertical line to straight with No.46 SIDE PIN.</div>									
<table><tr><th>MODEL</th><th>VALUE</th><th>A%</th></tr><tr><td>AV-27D200</td><td></td><td>90%</td></tr><tr><td>AV-32D200 / (A)</td><td></td><td>92%</td></tr></table>					MODEL	VALUE	A%	AV-27D200		90%	AV-32D200 / (A)		92%
MODEL	VALUE	A%											
AV-27D200		90%											
AV-32D200 / (A)		92%											

## ADJUSTMENT OF VIDEO / CHROMA CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (Low Light) adjustment	Signal generator		R CUTOFF G CUTOFF B CUTOFF  SCREEN VR	<ol style="list-style-type: none"> <li>1. Receive the black and white signal ( color off ).</li> <li>2. Select the [LOW LIGHT] MODE from the SERVICE MENU.</li> <li>3. Set the initial setting value of "R CUTOFF", "G CUTOFF" and "B CUTOFF" with the ④ to ⑨ keys of the remote control unit.</li> <li>4. Display a single horizontal line by pressing the ① key of the remote control unit.</li> <li>5. Turn the screen VR all the way to the left.</li> <li>6. Turn the screen VR gradually to the right from the left until either one of the red, blue or green colors appears faintly.</li> <li>7. Adjust the two colors which did not appear until the single horizontal line that is displayed becomes white using the ④ to ⑨ keys of the remote control unit.</li> <li>8. Turn the screen VR until the single horizontal line is displayed faintly.</li> <li>9. Press the ② key to cancel the single horizontal line mode.</li> </ol> <p>●The ③ EXIT key is the cancel key for the WHITE BALANCE.</p>
				
WHITE BALANCE (High Light) adjustment	Signal generator		G DRIVE B DRIVE	<ol style="list-style-type: none"> <li>1. Receive the black-and-white signal ( color off ).</li> <li>2. Select the [HIGH LIGHT] MODE in the SERVICE MENU.</li> <li>3. Set the initial setting value of "R DRIVE" and "B DRIVE" with the ④, ⑥, ⑦ and ⑨ keys of the remote control unit.</li> <li>4. Adjust the screen until it becomes white using the ④, ⑥, ⑦ and ⑨ keys of the remote control unit.</li> </ol> <p>●The ③ EXIT key is the cancel key for the WHITE BALANCE.</p>
				

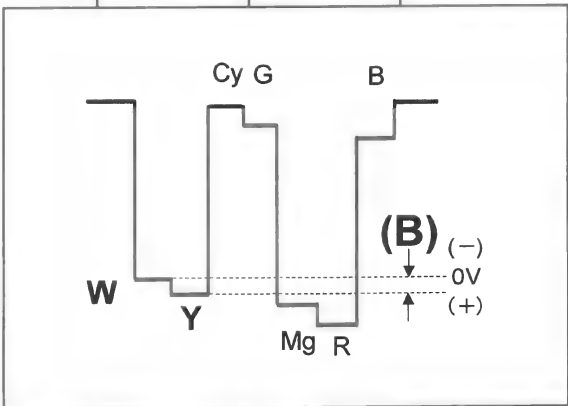


Item	Measuring instrument	Test point	Adjustment part	Description
SUB BRIGHT adjustment			No.1 BRIGHT	<ol style="list-style-type: none"> <li>1. Receive the broadcast.</li> <li>2. Select <b>No.1 BRIGHT</b> of the PICTURE MODE.</li> <li>3. Set the initial setting value of the <b>No.1 BRIGHT</b> with the LEFT/RIGHT key of the MENU.</li> <li>4. If the brightness is not the best with the initial setting value, make fine adjustment of the <b>No.1 BRIGHT</b> until you get the optimum brightness.</li> </ol>
SUB CONTRAST adjustment			No.2 PICTURE	<ol style="list-style-type: none"> <li>1. Receive the broadcast.</li> <li>2. Select <b>No.2 PICTURE</b> of the PICTURE MODE.</li> <li>3. Set the initial setting value of the <b>No.2 PICTURE</b> with the LEFT/RIGHT key of the MENU.</li> <li>4. If the contrast is not the best with the initial setting value, make fine adjustment of the <b>No.2 PICTURE</b> until you get the optimum contrast.</li> </ol>
SUB COLOR adjustment	Signal generator  Remote control unit		No.3 COLOR	<p>[ Method of adjustment without measuring instrument ]</p> <ol style="list-style-type: none"> <li>1. Receive the broadcast.</li> <li>2. Select <b>No.3 COLOR</b> of the PICTURE MODE.</li> <li>3. Set the initial setting value of the <b>No.3 COLOR</b> with the LEFT/RIGHT key of the MENU.</li> <li>4. If the color is not the best with the Initial setting value, make fine adjustment of the <b>No.3 COLOR</b> until you get the optimum color.</li> </ol>
	Signal generator  Oscilloscope  Remote control unit	TP-R TP-E(↗) [CRT SOCKET PWB]	No.3 COLOR	<p>[ Method of adjustment using measuring instrument ]</p> <ol style="list-style-type: none"> <li>1. Receive the broadcast.</li> <li>2. Select <b>No.3 COLOR</b> of the PICTURE MODE.</li> <li>3. Set the initial setting value of the <b>No.3 COLOR</b> with the LEFT/RIGHT key of the MENU.</li> <li>4. Connect the oscilloscope between TP-R and TP-E.</li> <li>5. Adjust COLOR and bring the value of <b>(A)</b> in the illustration to the voltage shown in the table below( <math>V_{w-r}</math> ).</li> </ol>



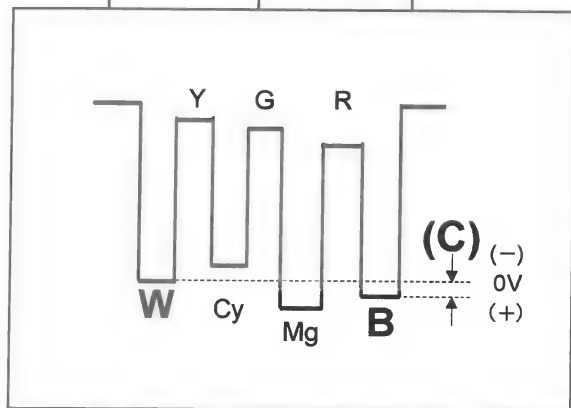
	Voltage between W-R
AV-27D200	+38V
AV-32D200	+38V

Item	Measuring instrument	Test point	Adjustment part	Description
SUB TINT adjustment	Signal generator  Remote control unit		No.4 TINT	<div>[ Method of adjustment without measuring instrument ]</div> <div>1. Receive the broadcast.</div> <div>2. Select <b>No.4 TINT</b> of the PICTURE MODE.</div> <div>3. Set the initial setting value of the <b>No.4 TINT</b> with the LEFT/RIGHT key of the MENU.</div> <div>4. If the tint is not the best with the initial setting value, make fine adjustment of the <b>No.4 TINT</b> until you get the optimum tint.</div>
	Signal generator  Oscilloscope  Remote control unit	TP-R TP-E( ↓ ) [CRT SOCKET PWB]	No.4 TINT	<div>[ Method of adjustment using measuring instrument ]</div> <div>1. Receive the broadcast.</div> <div>2. Select <b>No.4 TINT</b> of the PICTURE MODE.</div> <div>3. Set the initial setting value of the <b>No.4 TINT</b> with the LEFT/RIGHT key of the MENU.</div> <div>4. Connect the oscilloscope between TP-R and TP-E.</div> <div>5. Adjust TINT and bring the value of <b>(B)</b> in the illustration to the voltage shown in the table bellow ( <b>V<sub>w-y</sub></b> ).</div>



	Voltage between W-Y
AV-27D200	+24V
AV-32D200	+26V

Item	Measuring instrument	Test point	Adjustment part	Description
DEMODULATION-( I ) adjustment	Remote control unit		No.31 DEMO RT BY	<p>[ Method of adjustment without measuring instrument ]</p> <ol style="list-style-type: none"> <li>1. Receive the broadcast.</li> <li>2. Select <b>No.31 DEMO RT BY</b> of the PICTURE MODE.</li> <li>3. Set the initial setting value of the <b>No.31 DEMO RT BY</b> with the LEFT/RIGHT key of the MENU.</li> <li>4. If the blue color gain against the red color is not the best with the initial setting value, make fine adjustment of the <b>No.31 DEMO RT BY</b> until you get the optimum gain.</li> </ol> <ul style="list-style-type: none"> <li>• DEMODULATION RATIO is the adjustment of the blue color demodulation gain against the red color.</li> </ul>
DMODULATION-( II ) adjustment	Signal generator  Oscilloscope  Remote control unit	TP-B TP-E(↓) [CRT SOCKET PWB]	No.31 DEMO RT BY	<p>[ Method of adjustment using measuring instrument ]</p> <ol style="list-style-type: none"> <li>1. Receive the broadcast.</li> <li>2. Select <b>No.31 DEMO RT BY</b> of the PICTURE MODE.</li> <li>3. Set the initial setting value of the <b>No.31 DEMO RT BY</b> with the LEFT/RIGHT key of the MENU.</li> <li>4. Connect the oscilloscope between TP-B and TP-E.</li> <li>5. Adjust TINT and bring the value of <b>(C)</b> in the illustration to the voltage shown in the table bellow ( <b>V<sub>w-b</sub></b> ).</li> </ol>



	Voltage between W-B
AV-27D200	+10V
AV-32D200	+20V



## ADJUSTMENT OF MTS CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
MTS INPUT LEVEL check			No.2 IN LEVEL	<ol style="list-style-type: none"> <li>1. Select the <b>No.2 IN LEVEL</b> of the SOUND MODE.</li> <li>2. Verify that the <b>No.2 IN LEVEL</b> is set at its initial setting value.</li> </ol>
MTS STEREO VCO adjustment	Signal generator  Frequency counter	R OUT [AUDIO OUT]	No.3 FH MONITOR No.4 STEREO VCO	<ol style="list-style-type: none"> <li>1. Receive the RF signal (non-modulated sound signal) from the antenna terminal.</li> <li>2. Select the <b>No.3 FH MONITOR</b> of SOUND MODE, and change the setting value from 0 to 1.</li> <li>3. Connect the frequency counter to R out RCA pin of the AUDIO OUT.</li> <li>4. Select the <b>No.4 STEREO VCO</b>.</li> <li>5. Set the initial setting value of the <b>No.4 STEREO VCO</b> with the LEFT/RIGHT key of the menu.</li> <li>6. Adjust the <b>No.4 STEREO VCO</b> so that the frequency counter will display <math>15.73\text{kHz} \pm 0.1\text{kHz}</math>.</li> <li>7. Select the <b>No.3 FH MONITOR</b> of the SOUND MODE, and reset the setting value from 1 to 0.</li> </ol>
MTS SAP VCO adjustment	Signal generator	<b>[MPX]</b> Connector <b>[4]</b> pin SDA <b>[3]</b> pin GND <b>[AV SELECTOR PWB]</b>  R OUT [AUDIO OUT]	No.9 5FH MON. No.10 SAP VCO	<ol style="list-style-type: none"> <li>1. Receive the RF signal (non-modulated sound signal) from the antenna terminal.</li> <li>2. Connect between pin <b>[4]</b> of <b>[MPX]</b> connector and GND (Pin <b>[3]</b> of <b>[MPX]</b> connector) through <math>1\text{M}\Omega</math> resistor.</li> <li>3. Select the <b>No.9 5FH MON.</b> of the SOUND MODE, and reset the setting value from 0 to 1.</li> <li>4. Connect the frequency counter to R out RCA pin of the AUDIO OUT.</li> <li>5. Select the <b>No.10 SAP VCO</b>.</li> <li>6. Set the initial setting value of <b>No.10 SAP VCO</b> with the LEFT/RIGHT key of the menu.</li> <li>7. Adjust the <b>No.10 SAP VCO</b> so that the frequency counter will display <math>78.67\text{kHz} \pm 0.5\text{kHz}</math>.</li> <li>8. Select the <b>No.9 5FH MON.</b> of the SOUND MODE, and reset the setting value from 1 to 0.</li> </ol>
MTS FILTER check			No.6 FILTER	<ol style="list-style-type: none"> <li>1. Select the <b>No.6 FILTER</b> of the SOUND MODE.</li> <li>2. Verify that the <b>No.6 FILTER</b> is set at its initial setting value.</li> </ol>

Item	Measuring instrument	Test point	Adjustment part	Description
MTS SEPARATION adjustment	TV audio multiplex signal generator	L OUT R OUT [AUDIO OUT]	No.7 LOW SEP. No.8 HI SEP.	<div><div>1. Input the stereo L signal (300Hz) from the TV audio multiplex signal generator to the antenna terminal.</div><div>2. Connect an oscilloscope to L OUT RCA pin of the AUDIO OUT, and display one cycle portion of the 300Hz signal.</div><div>3. Change the connection of the oscilloscope to R OUT RCA pin of the AUDIO OUT, and enlarge the voltage axis.</div><div>4. Select the <b>No.7 LOW SEP.</b> of the SOUND MODE.</div><div>5. Set the initial setting value of the <b>No.7 LOW SEP.</b> with the LEFT/RIGHT key of the menu.</div><div>6. Adjust the <b>No.7 LOW SEP.</b> so that the stroke element of the 300Hz signal will become minimum.</div><div>7. Change the signal to 3kHz, and similarly adjust the <b>No.8 HI SEP.</b></div></div>
	Oscilloscope			

L-Channel signal waveform

R-Channel crosstalk portion

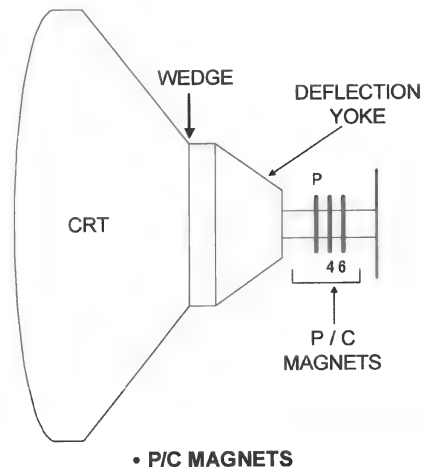
1 cycle

Minimum

## PURITY, CONVERGENCE

### PURITY ADJUSTMENT

1. Demagnetize CRT with the demagnetizer.
2. Loosen the retainer screw of the deflection yoke.
3. Remove the wedges.
4. Input a green raster signal from the signal generator, and turn the screen to green raster.
5. Move the deflection yoke backward.
6. Bring the long lug of the purity magnets on the short lug and position them horizontally. (Fig.2)
7. Adjust the gap between two lugs so that the GREEN RASTER will come into the center of the screen. (Fig.3)
8. Move the deflection yoke forward, and fix the position of the deflection yoke so that the whole screen will become green.
9. Insert the wedge to the top side of the deflection yoke so that it will not move.
10. Input a crosshatch signal.
11. Verify that the screen is horizontal.
12. Input red and blue raster signals, and make sure that purity is properly adjusted.



• P/C MAGNETS  
P : PURITY MAGNET  
4 : 4 POLES (convergence magnets)  
6 : 6 POLES (convergence magnets)

Fig.1

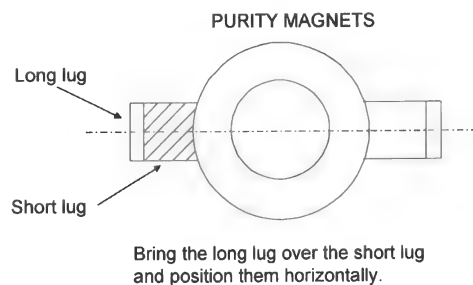


Fig.2

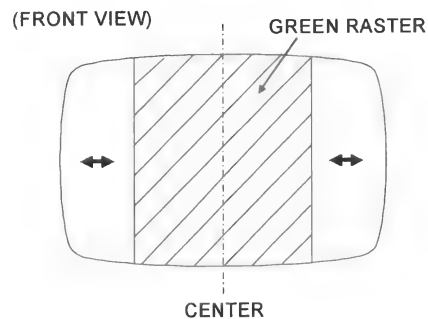


Fig.3

### STATIC CONVERGENCE ADJUSTMENT

1. Input a crosshatch signal.
2. Using 4-pole convergence magnets, overlap the red and blue lines in the center of the screen (Fig.1) and turn them to magenta (red/blue).
3. Using 6-pole convergence magnets, overlap the magenta (red/blue) and green lines in the center of the screen and turn them to white.
4. Repeat 2 and 3 above, and make best convergence.

### DYNAMIC CONVERGENCE ADJUSTMENT

1. Move the deflection yoke up and down and overlap the lines in the periphery. (Fig. 2)
  2. Move the deflection yoke left to right and overlap the lines in the periphery. (Fig. 3)
  3. Repeat 1 and 2 above, and make best convergence.
- After adjustment, fix the wedge at the original position.  
Fasten the retainer screw of the deflection yoke.  
Fix the 6 magnets with glue.

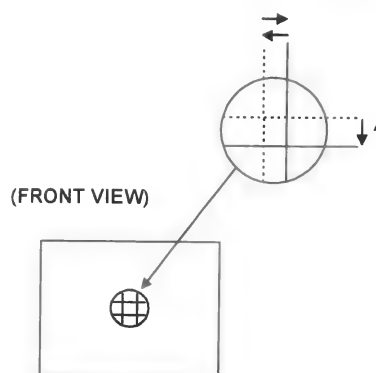


Fig.1

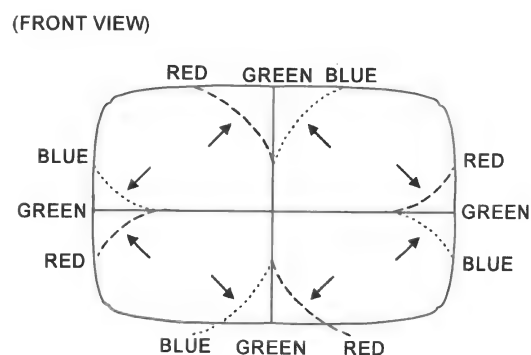


Fig.2

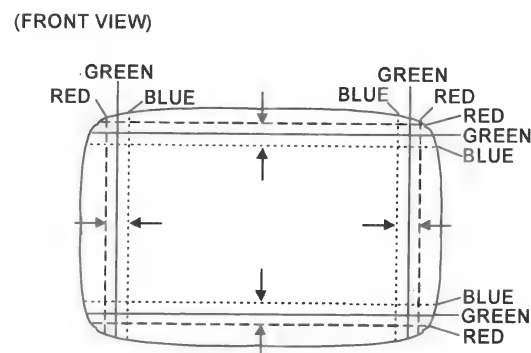


Fig.3

## HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

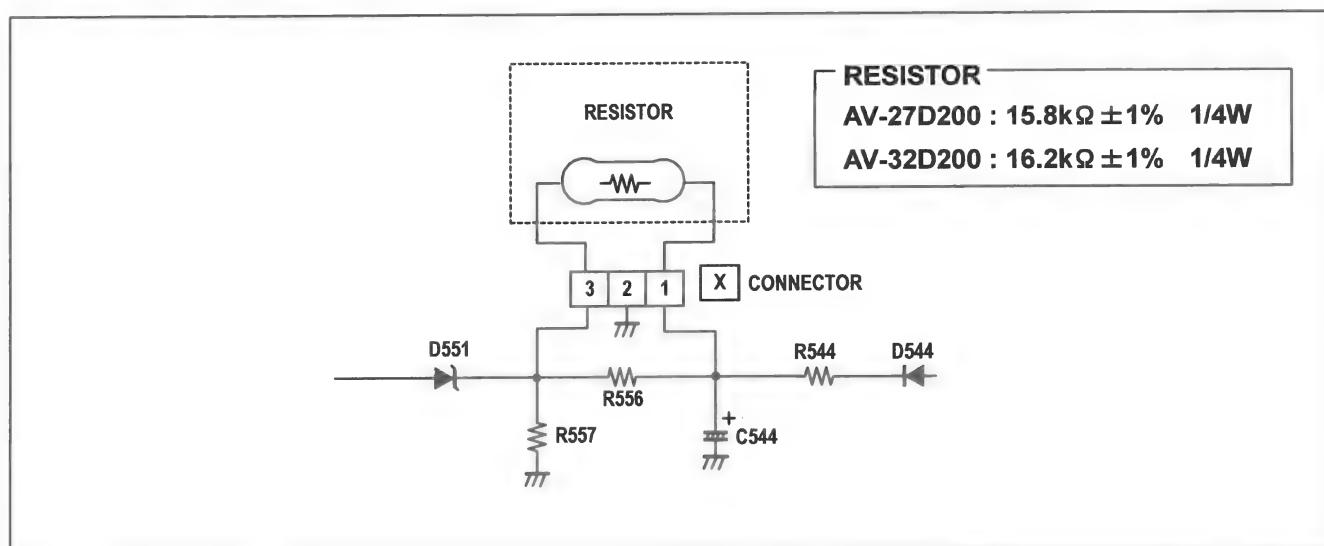
### 1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit.

This circuit shall be checked to operate correctly.

### 2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

- (1) Turn the power sw ON.
- (2) As shown in figure bellow, set the resistor (between [X] connector [1] & [3] ).
- (3) Make sure that the screen picture disappears.
- (4) Temporarily unplug the power cord.
- (5) Remove the resistor (between [X] connector [1] & [3] ).
- (6) Again plug the power cord, make sure that the normal picture is displayed on the screen.



# AV-32D200(A US&A CA) STANDARD CIRCUIT DIAGRAM

## NOTE ON USING CIRCUIT DIAGRAMS

### 1.SAFETY

The components identified by the  $\Delta$  symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

### 2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Color bar signal
  - (2)Setting positions of each knob/button and variable resistor : Original setting position when shipped
  - (3)Internal resistance of tester : DC 20k  $\Omega$  /V
  - (4)Oscilloscope sweeping time : H  $\Rightarrow$  20 $\mu$ S/div  
: V  $\Rightarrow$  5mS/div  
: Others  $\Rightarrow$  Sweeping time is specified
  - (5)Voltage values : All DC voltage values
- \* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

### 3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R1209→R209

### 4.INDICATIONS ON THE CIRCUIT DIAGRAM

#### (1)Resistors

##### ●Resistance value

- No unit : [ $\Omega$ ]
- K : [K $\Omega$ ]
- M : [M $\Omega$ ]

##### ●Rated allowable power

- No indication : 1/10 [W]
- Others : As specified

##### ●Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflamable resistor
- FR : Fusible resistor

\*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

#### (2)Capacitors

##### ●Capacitance value

- 1 or higher : [pF]
- less than 1 : [ $\mu$ F]

##### ●Withstand voltage

- No indication : DC50[V]
- Others : DC withstand voltage [V]
- AC indicated : AC withstand voltage [V]

\*Electrolytic Capacitors

47/50[Example]:Capacitance value [ $\mu$ F]/withstand voltage[V]




##### ●Type

- No indication : Ceramic capacitor
- MY : Mylar capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

##### (3)Coils



- No unit : [ $\mu$ H]
- Others : As specified

##### (4)Power Supply



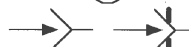
-  : B1
-  : B2(12V)
-  : 9V
-  : 5V

\*Respective voltage values are indicated





##### (5)Test point

-  : Test point
-  : Only test point display

##### (6)Connecting method

-  : Connector
-  : Wrapping or soldering
-  : Receptacle

##### (7)Ground symbol

-  : LIVE side ground
-  : ISOLATED(NEUTRAL) side ground
-  : EARTH ground
-  : DIGITAL ground

## 5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ( $\perp$ ) side GND and the ISOLATED(NEUTRAL) : ( $\text{⏏}$ ) side GND. Therefore, care must be taken for the following points.


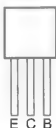
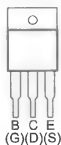


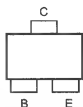

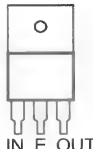
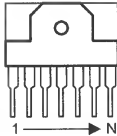
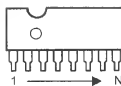
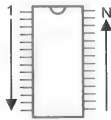
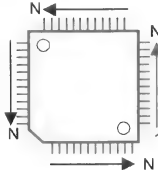
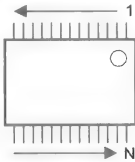
- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus ( oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

# CONTENTS

■ SEMICONDUCTOR SHAPES .....	2-2
■ BLOCK DIAGRAM [ AV-27D200 / AV-32D200 / AV-32D200A ] .....	2-3
■ CIRCUIT DIAGRAMS	
• MAIN & FRONT CONTROL PWB CIRCUIT DIAGRAM .....	2-5
• MAIN & CRT SOCKET PWB CIRCUIT DIAGRAM .....	2-7
• AV SELECTOR PWB CIRCUIT DIAGRAM .....	2-9
• IF PWB CIRCUIT DIAGRAM .....	2-11
■ PATTERN DIAGRAMS	
• MAIN PWB PATTERN .....	2-13
• AV SELECTOR PWB PATTERN .....	2-15
• FRONT CONTROL PWB PATTERN .....	2-16
• CRT SOCKET PWB PATTERN .....	2-17
• IF PWB PATTERN .....	2-18
■ CHANNEL CHART	
[US] .....	2-19
[CA] .....	2-20

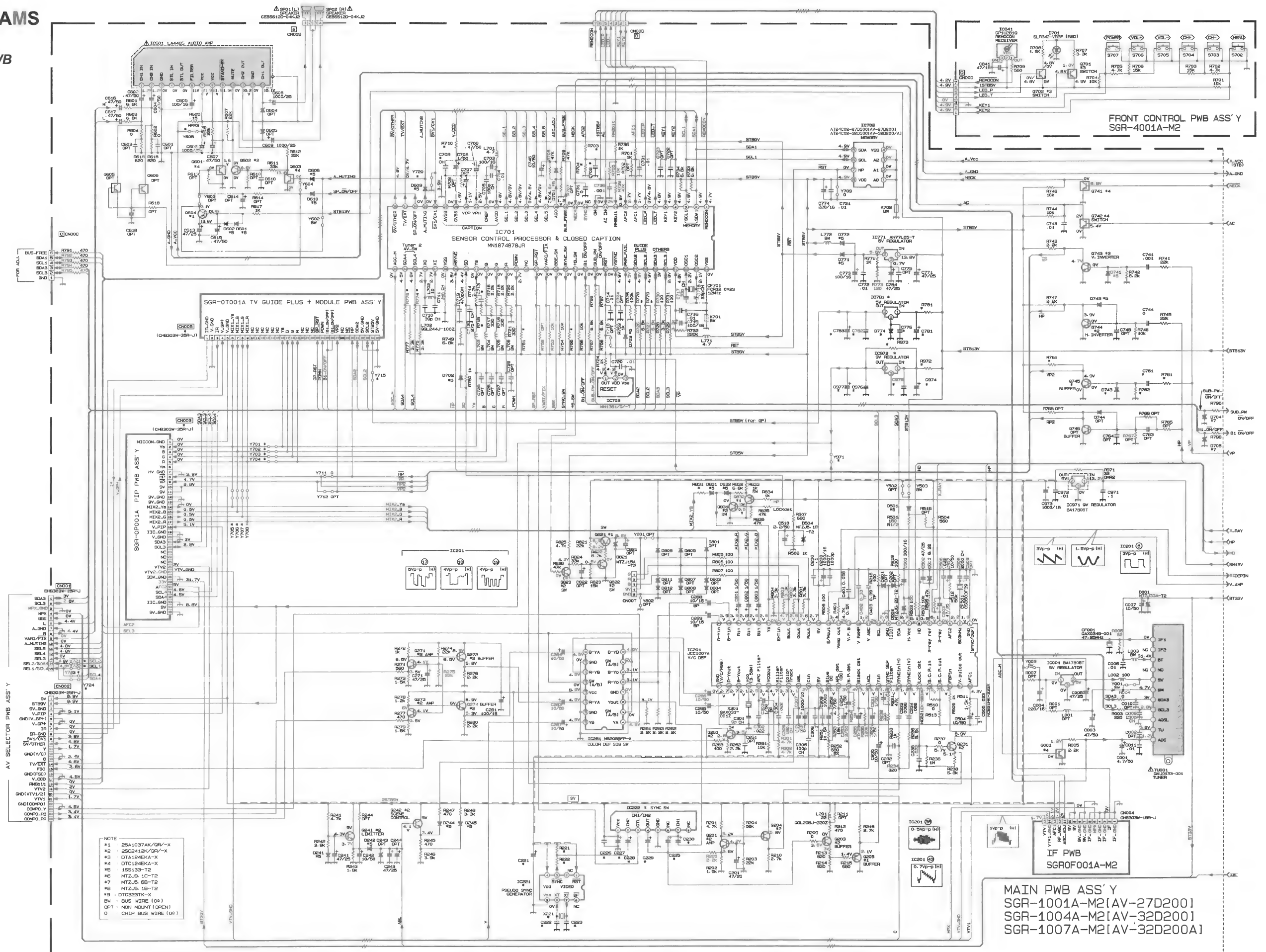
## SEMICONDUCTOR SHAPES

TRANSISTOR							
BOTTOM VIEW	FRONT VIEW				TOP VIEW		
					CHIP TR 		
IC							
BOTTOM VIEW	FRONT VIEW			TOP VIEW			
							
CHIP IC							
TOP VIEW							
							





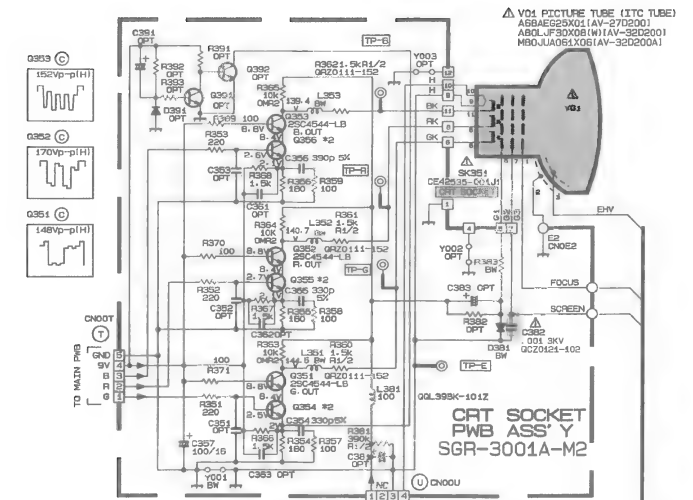
*MARKED PARTS	
Y701	SW
Y702	SW
Y703	SW
Y704	SW
Y705	SW
Y706	SW
Y707	SW
Y708	SW
X221	OPT
IC221	OPT
IC222	OPT
R221	OPT
R222	OPT
C221	OPT
C222	OPT
C223	OPT
C225	47/25
C226	OPT
C227	OPT
C228	OPT
C229	OPT
C230	SW
IC972	OPT
R972	OPT
C974	OPT
C977	OPT
Y991	SW
R751	OPT
R755	OPT
R778	OPT
R779	OPT
R774	OPT
R776	OPT
IC781	OPT
R781	OPT
C781	OPT
D774	OPT
C776	OPT
C782	OPT
C783	OPT
IC972	OPT
R972	OPT
R973	OPT
C974	OPT
C975	OPT
C976	OPT
C977	OPT
Y971	SW
CN903	OPT
CN905	OPT
Y720	OPT
Y721	0
Y722	0
Y723	OPT
Y724	OPT
R703	OPT
R704	0
C702	OPT
R761	OPT
R762	OPT
R763	OPT
C761	OPT
G745	OPT
D743	OPT
R710	330
C216	220p
R715	2-2k
C713	OPT
R831	0
Y715	OPT



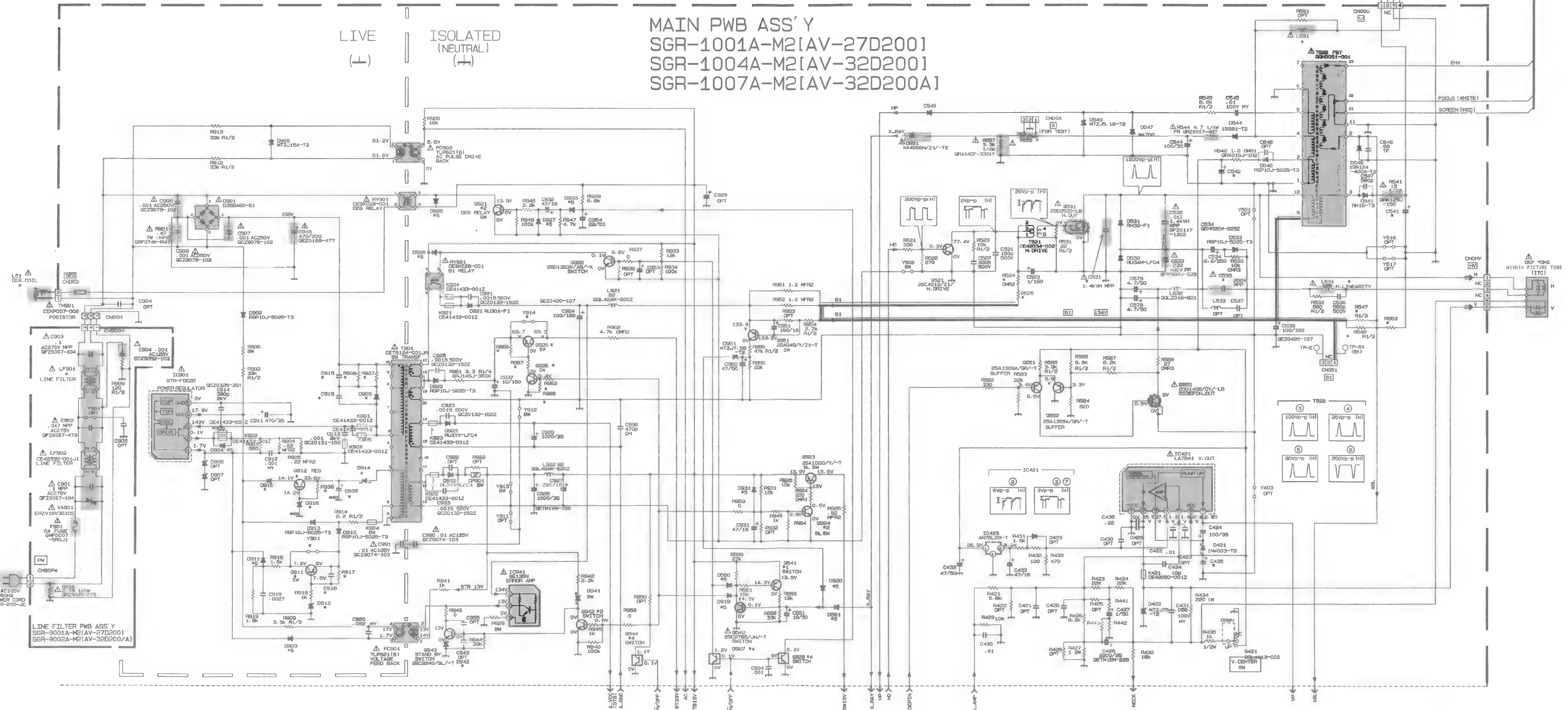
## \* DIFFERENCE LIST(\*PARTS)

* /	SGR- 9001A-M2	SGR- 9002A-M2
LF901	CELFO08 -001J5	CELFO01 -001J1

* /	SGR- 9001A-M2	SGR- 9002A-M2
LF901	CELFO08 -001J5	CELFO01 -001J1



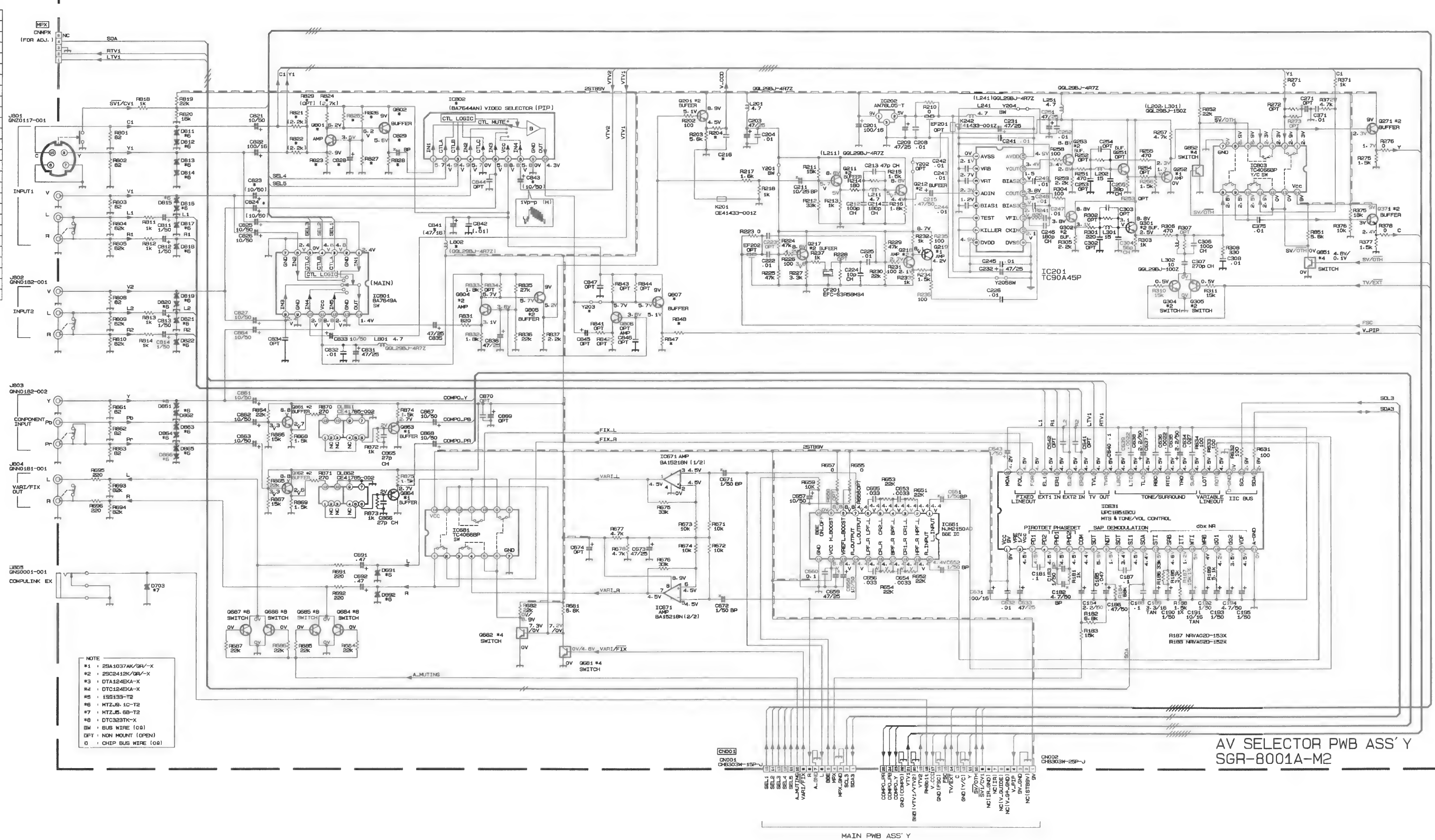
```
NOTE
#1 : 2SA1037AK/GR/-X
#2 : 2SC2413K/GR/-X
#3 : DT1242EKA-X
#4 : DTC1242EKA-X
#5 : 1SS133-T2
#6 : MTZJ9, 1C-T2
#7 : MTZJ5, 6B-T2
BW : BUS WIRE
OPT : NON MOUNT (OPEN)
0 : CHIP BUS WIRE
```



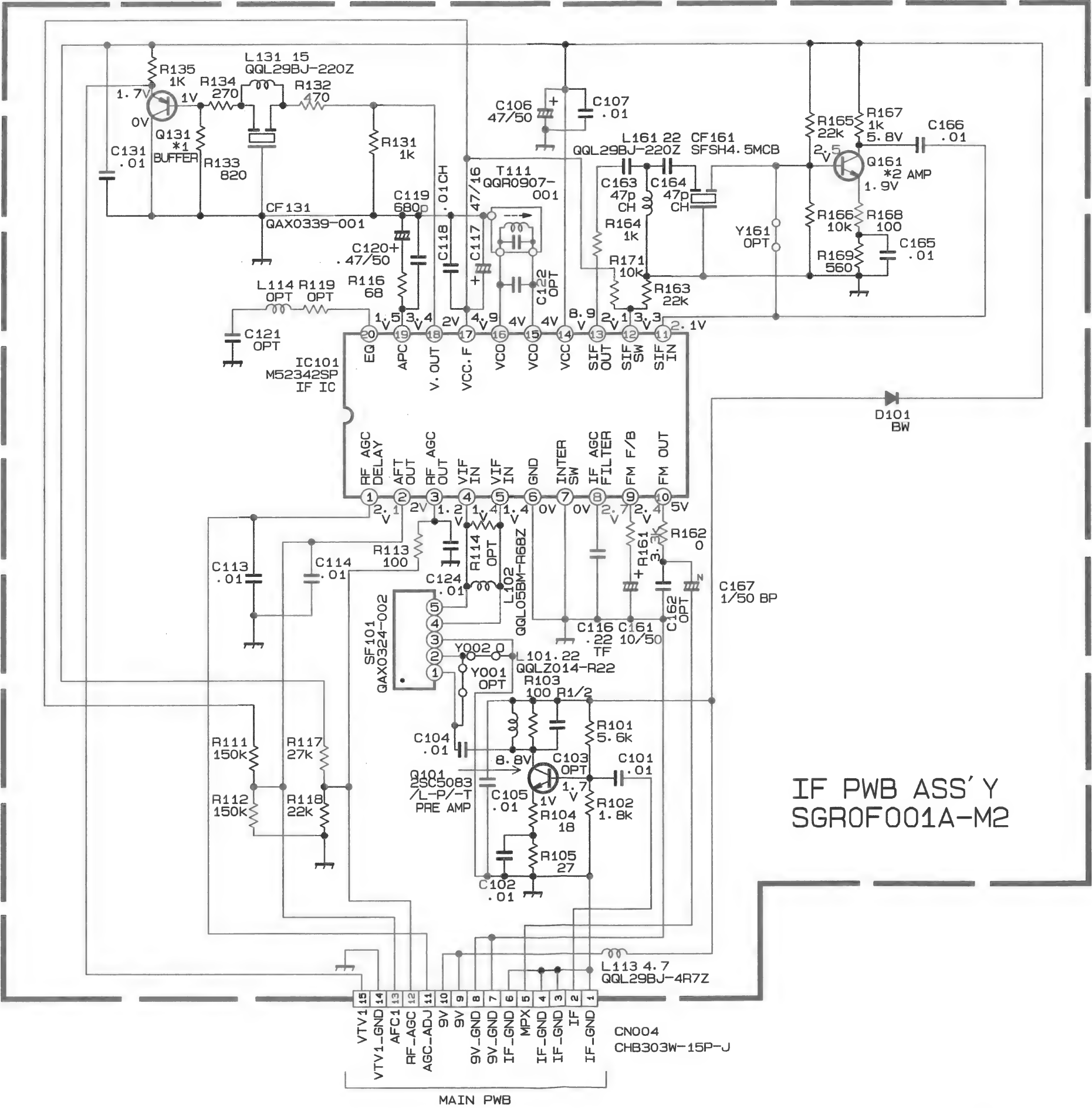
[ AV SELECTOR PWB CIRCUIT DIAGRAM ]

\* MARKED PARTS

IC802	OPT
Q801	OPT
Q802	OPT
Q803	OPT
Y203	OPT
Q807	OPT
C823	OPT
C824	OPT
C829	OPT
C829	OPT
C841	OPT
C842	OPT
C843	OPT
R204	100
C216	OPT
L822	BW
R821	OPT
R822	0
R823	22k
R824	OPT
R825	OPT
R826	OPT
R827	OPT
R828	OPT
R829	68k
R847	OPT
R848	OPT







# PATTERN DIAGRAMS

[ MAIN PWB PATTERN ]

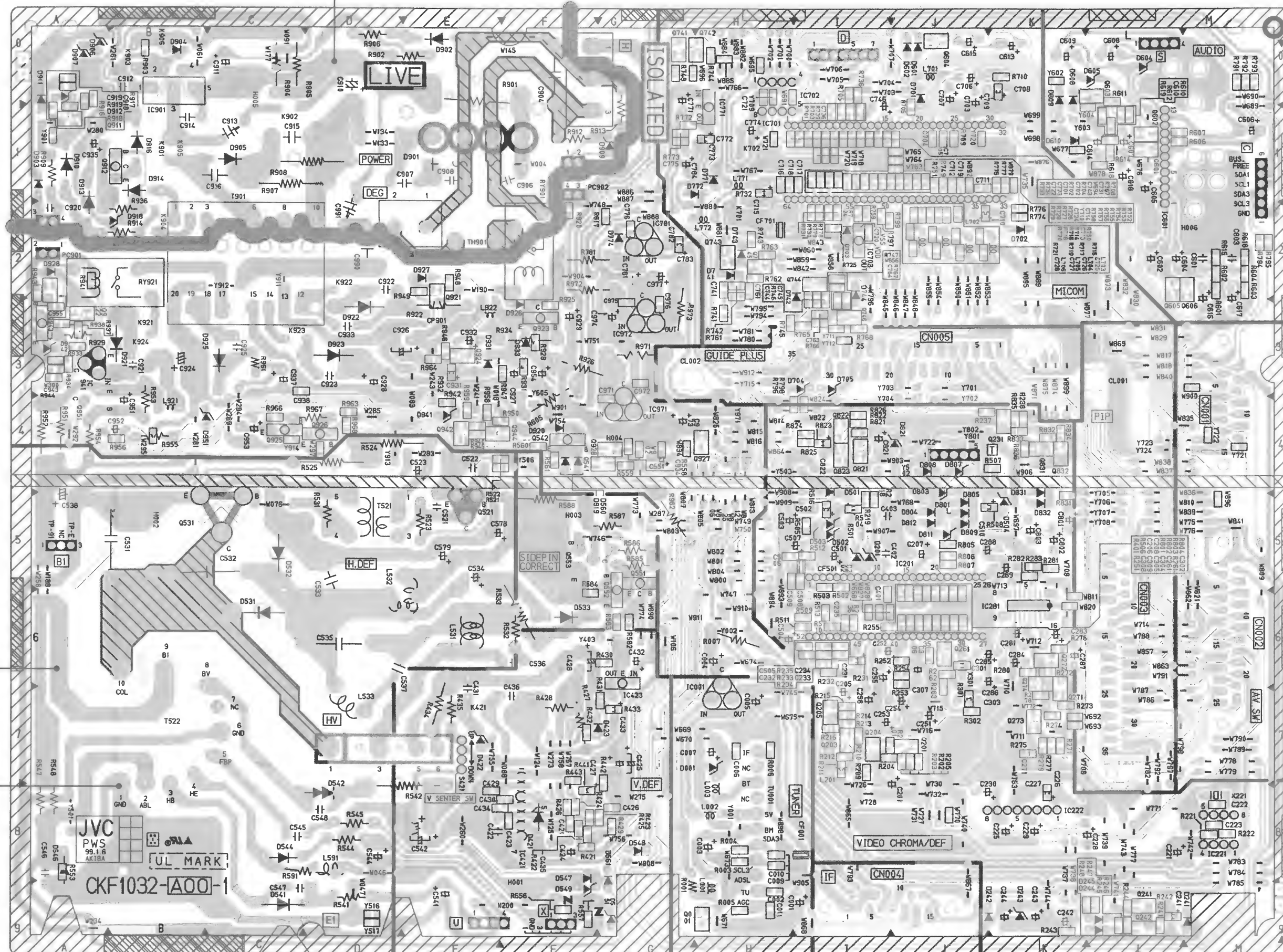
AV-27D200  
AV-32D200

AV-27D200  
AV-32D200

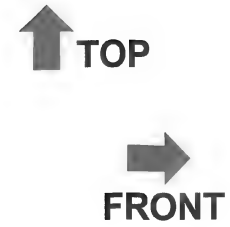
FRONT

TP-91  
(B1)

TP-E  
(H)

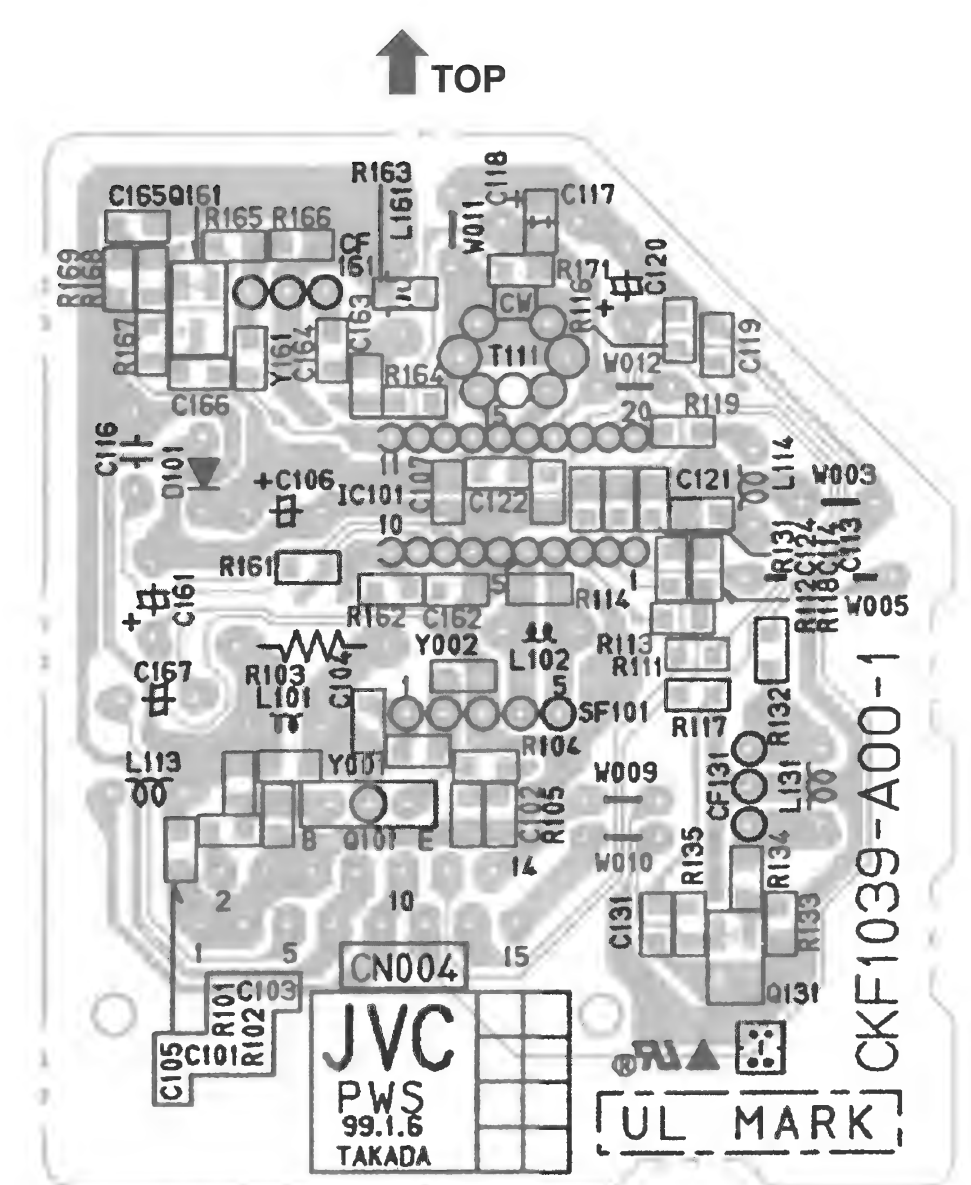
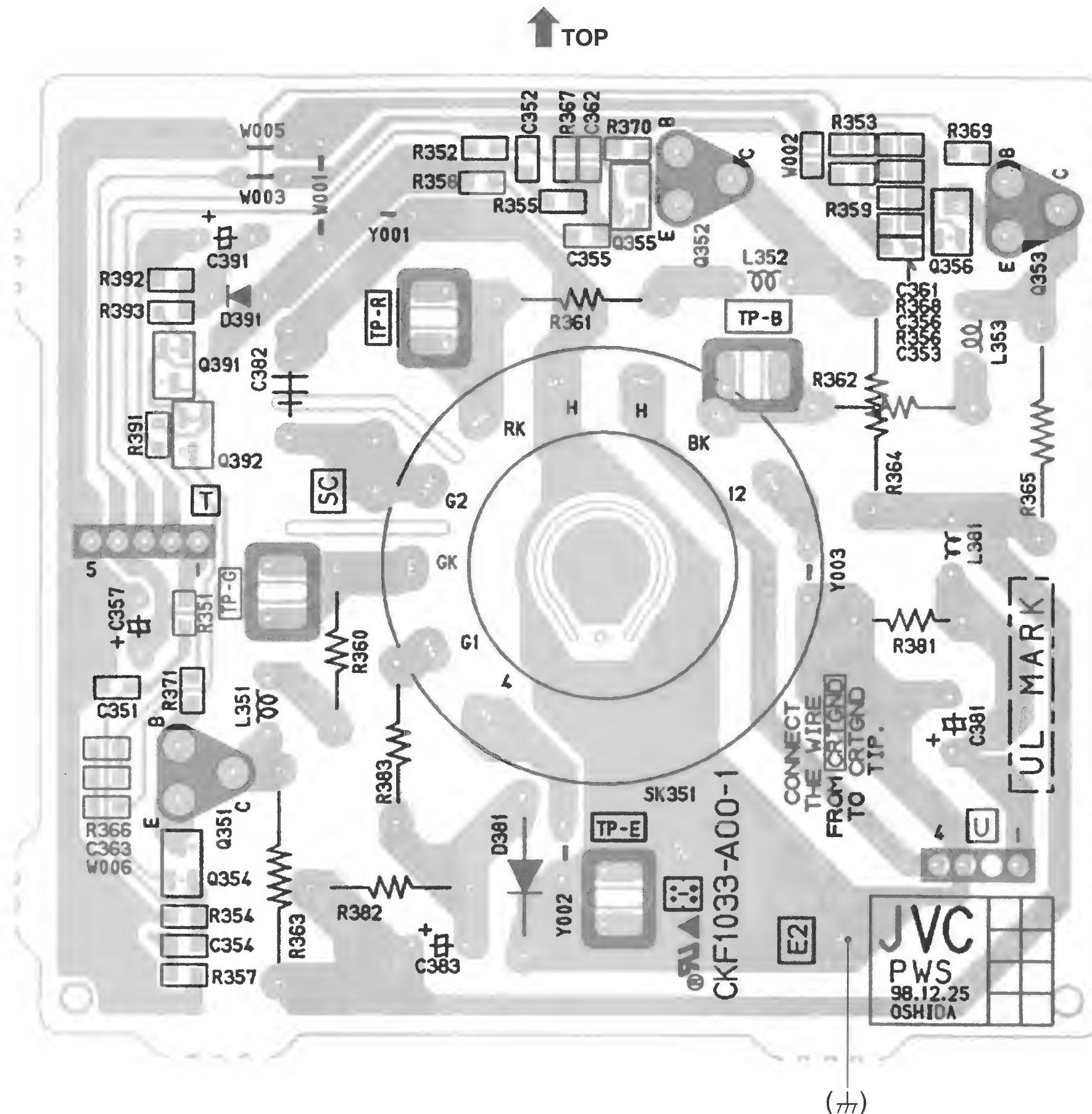






[ CRT SOCKET PWB PATTERN ]

[ IF PWB PATTERN ]





# CHANNEL CHART (US)

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP	
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		II
			08		
			09		
			10		
			11		
			12		
			13		
		MID	A	14	I
			B	15	
			C	16	
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
×	○	SUPER	J	23	II
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	
			Q	30	
			R	31	
			S	32	
			T	33	
			U	34	
		HYPER	W+1	37	IV
			W+2	38	
			W+3	39	
			W+4	40	
			W+5	41	
			W+6	42	
			W+7	43	
			W+8	44	
			W+9	45	
			W+10	46	
			W+11	47	
		ULTRA	W+12	48	IV
			W+13	49	
			W+14	50	
			W+15	51	
			W+16	52	
			W+17	53	
			W+18	54	
			W+19	55	
			W+20	56	
			W+21	57	
			W+22	58	
		ULTRA	W+23	59	IV
			W+24	60	
			W+25	61	
			W+26	62	
			W+27	63	
			W+28	64	
			W+29	65	
			W+30	66	
			W+31	67	
			W+32	68	
			W+33	69	
			W+34	70	

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP	
×	○	ULTRA	W+35	71	IV
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
			W+68	109	
			W+69	110	
			W+70	111	
			W+71	112	
			W+72	113	
			W+73	114	
			W+74	115	
			W+75	116	
			W+76	117	
			W+77	118	
			W+78	119	
			W+79	120	
			W+80	121	
			W+81	122	
			W+82	123	
			W+83	124	
			W+84	125	
		SUB MID	A-8	01	I
			A-4	96	
			A-3	97	
			A-2	98	
		UHF	A-1	99	IV
○	×	UHF	14	69	IV
TOTAL 180CH					
{ VHF 124CH					
{ UHF 56CH					
NOTE:					
TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES.					
SPECIAL ADAPTERS MAY BE REQUIRED.					

## ■ CHANNEL CHART (CA)

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		
			08		
			09		
			10		
			11		
			12		
			13		
×	○	MID	A	14	II
			B	15	
			C	16	
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
		SUPER	J	23	
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	
			Q	30	
			R	31	
		HYPER	S	32	III
			T	33	
			U	34	
			V	35	
			W	36	
			W+1	37	
			W+2	38	
			W+3	39	
			W+4	40	
			W+5	41	
			W+6	42	
			W+7	43	
			W+8	44	
			W+9	45	
			W+10	46	
			W+11	47	
			W+12	48	
			W+13	49	
			W+14	50	
			W+15	51	
			W+16	52	
			W+17	53	
			W+18	54	
			W+19	55	
			W+20	56	
			W+21	57	
			W+22	58	
			W+23	59	
			W+24	60	
			W+25	61	
			W+26	62	
			W+27	63	
			W+28	64	
		ULTRA	W+29	65	IV
			W+30	66	
			W+31	67	
			W+32	68	
			W+33	69	
			W+34	70	

MODE		BAND	CHANNEL		TUNER
TV	CATV		REAL	DISP.	BAND
×	○	ULTRA	W+35	71	IV
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
		W+68	109		
		W+69	110		
		W+70	111		
		W+71	112		
		W+72	113		
		W+73	114		
		W+74	115		
		W+75	116		
		W+76	117		
		W+77	118		
		W+78	119		
		W+79	120		
W+80	121				
W+81	122				
W+82	123				
W+83	124				
W+84	125				
		SUB MID	A-8	01	I
			A-4	96	II
			A-3	97	
			A-2	98	
			A-1	99	
○	×	UHF	14 { 69		IV
TOTAL 180CH { VHF 124CH { UHF 56CH					
NOTE: TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES. SPECIAL ADAPTERS MAY BE REQUIRED.					

# PARTS LIST

## CAUTION

- The parts identified by the  $\Delta$  symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines — in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

## ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
$\pm 1\%$	$\pm 2\%$	$\pm 5\%$	$\pm 10\%$	$\pm 20\%$	$\pm 30\%$	+30% -10%	+50% -10%	+80% -20%	+100% 0%

## CONTENTS

■ USING CRT, P.W. BOARD & REMOTE CONTROL UNIT .....	35
---	----

### I. [ AV-27D200 (US&CA) ]

■ EXPLODED VIEW PARTS LIST .....	36
■ EXPLODED VIEW .....	37
■ PRINTED WIRING BOARD PARTS LIST	
● MAIN PW BOARD ASS'Y .....	38
● CRT SOCKET PW BOARD ASS'Y .....	42
● FRONT CONTROL PW BOARD ASS'Y .....	42
● AV SELECTOR PW BOARD ASS'Y .....	43
● LINE FILTER PW BOARD ASS'Y .....	44
● IF PW BOARD ASS'Y .....	45
■ PACKING .....	46
■ PACKING PARTS LIST .....	46

### II. [ AV-32D200 (US&CA) ]

■ EXPLODED VIEW PARTS LIST .....	48
■ EXPLODED VIEW .....	49
■ PRINTED WIRING BOARD PARTS LIST	
● MAIN PW BOARD ASS'Y .....	50
● CRT SOCKET PW BOARD ASS'Y .....	54
● FRONT CONTROL PW BOARD ASS'Y .....	54
● AV SELECTOR PW BOARD ASS'Y .....	54
● LINE FILTER PW BOARD ASS'Y .....	54
● IF PW BOARD ASS'Y .....	54

### III. [ AV-32D200 ( A US&A CA ) ]

■ PRINTED WIRING BOARD PARTS LIST	
● MAIN PW BOARD ASS'Y .....	55
● CRT SOCKET PW BOARD ASS'Y .....	59
● FRONT CONTROL PW BOARD ASS'Y .....	59
● AV SELECTOR PW BOARD ASS'Y .....	59
● LINE FILTER PW BOARD ASS'Y .....	59
● IF PW BOARD ASS'Y .....	59
■ REMOTE CONTROL UNIT PARTS LIST .....	59
■ PACKING .....	60
■ PACKING PARTS LIST .....	61

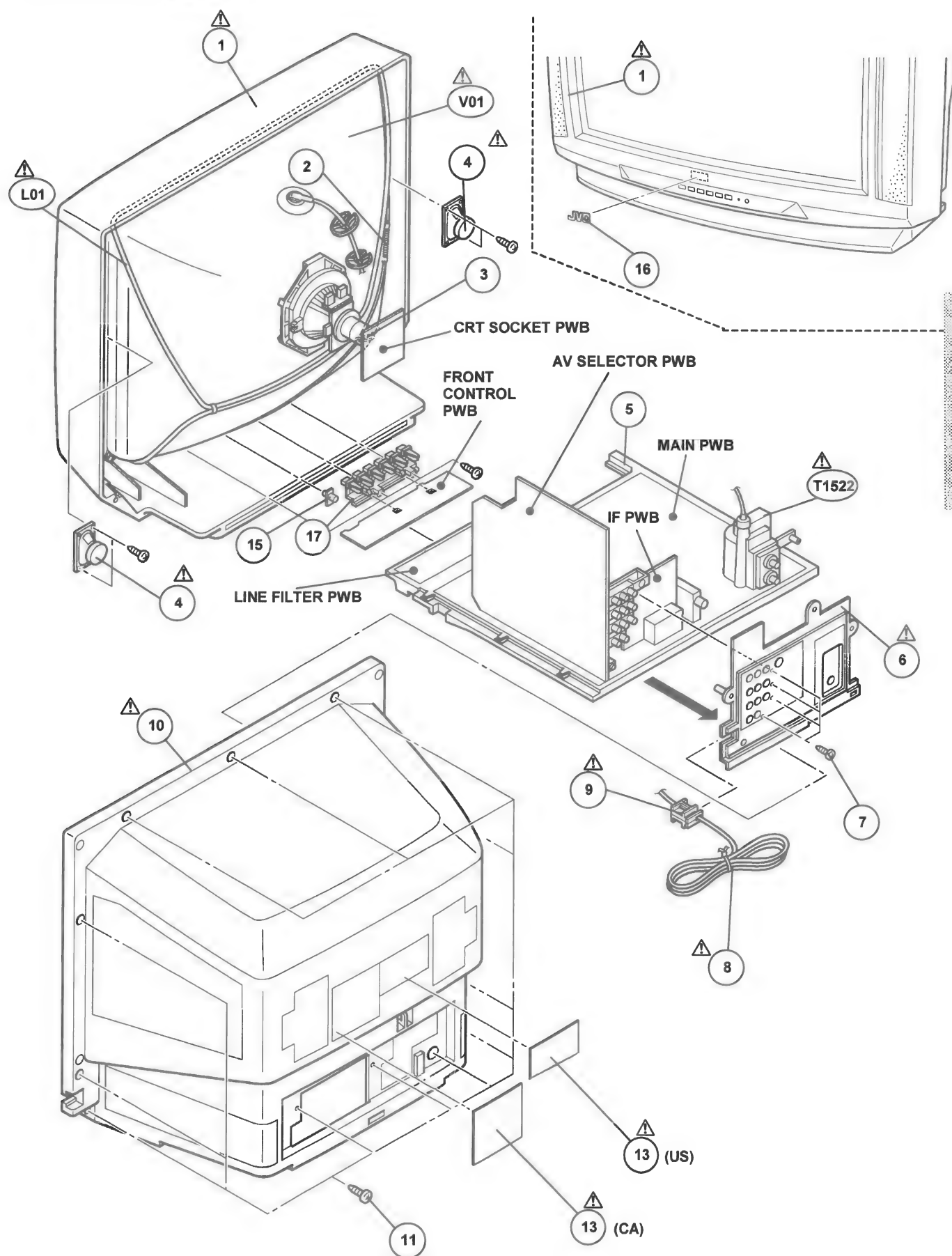
## USING CRT, P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y Model	I	II	III
	AV-27D200(US&CA)	AV-32D200 (US&CA)	AV-32D200 (A US&A CA)
CRT (ITC TUBE)	A68AEG25X01	A80LJF30X08(W)	M80JUA061X06
MAIN PWB	SGR-1001A-M2	SGR-1004A-M2	SGR-1007A-M2
CRT SOCKET PWB	SGR-3001A-M2	←	←
FRONT CONTROL PWB	SGR-4001A-M2	←	←
AV SELECTOR PWB	SGR-8001A-M2	←	←
LINE FILTER PWB	SGR-9001A-M2	SGR-9002A-M2	←
IF PWB	SGR0F001A-M2	←	←
REMOTE CONTROL UNIT	RM-C342-1A	←	←

**I . AV-27D200 (US&CA)****EXPLODED VIEW PARTS LIST**

△ Ref.No.	Part No.	Part Name	Description	Local
△ V01	A68AEG25X01	PICTURE TUBE	Inc DY	*
△ L01	CE41329-00DJB	DEGAUSSING COIL		*
△ T1522	QQH0051-001	FBT	Within MAIN PWB	*
△ 1	LC10276-001E-A	FRONT CABINET		*
2	CHGB0015-0B	BRAIDED WIRE		*
3	CHGB0016-0C	BRAIDED WIRE	(SUB)	*
△ 4	CEB5512D-04KJ2	SPEAKER	(×2)SP01,SP02	*
5	LC10363-001D-A	CHASSIS BASE		*
△ 6	LC10364-001C-A	TERMINAL BOARD		*
7	SBSB3010Z	TAPPING SCREW	(×4)	*
△ 8	QMPD200-200-JC	POWER CORD	Within LINE FILTER PWB	*
△ 9	LC20106-001B-A	POWER CORD CLAMP		*
△ 10	LC10277-001D-A	REAR COVER		*
11	GBSF4016Z	TAPPING SCREW	(×12)	*
△ 13	CM23034-001-A	RATING LABEL	(US)	*
△ 13	CM22999-A01-A	RATING LABEL	(CA)	*
15	LC30191-002A-A	REMOCON LENS		*
16	CM48006-A03-H	JVC MARK		*
17	LC20217-001B-A	CONTROL KNOB		*

# EXPLODED VIEW



AV-27D200 (US&CA)

# PRINTED WIRING BOARD PARTS LIST

## MAIN P.W. BOARD ASS'Y (SGR-1001A-M2)

△ Symbol No. Part No. Part Name Description Local

### RESISTOR

R1003	NRSA02J-221X	MG R	220Ω 1/10W	J	*
R1004	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J	*
R1005	NRSA02J-103X	MG R	10kΩ 1/10W	J	*
R1006	NRSA02J-820X	MG R	82Ω 1/10W	J	*
R1201	NRSA02J-472X	MG R	4.7kΩ 1/10W	J	*
R1202	NRSA02J-152X	MG R	1.5kΩ 1/10W	J	*
R1203	NRSA02J-223X	MG R	22kΩ 1/10W	J	*
R1204	NRSA02J-563X	MG R	56kΩ 1/10W	J	*
R1205	NRSA02J-222X	MG R	2.2kΩ 1/10W	J	*
R1209	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J	*
R1210	NRSA02J-272X	MG R	2.7kΩ 1/10W	J	*
R1212	NRSA02J-471X	MG R	470Ω 1/10W	J	*
R1213-14	NRSA02J-821X	MG R	820Ω 1/10W	J	*
R1215	NRSA02J-681X	MG R	680Ω 1/10W	J	*
R1216	NRSA02J-272X	MG R	2.7kΩ 1/10W	J	*
R1218-19	NRSA02J-101X	MG R	100Ω 1/10W	J	*
R1231	NRSA02J-473X	MG R	47kΩ 1/10W	J	*
R1232	NRSA02J-221X	MG R	220Ω 1/10W	J	*
R1233	NRSA02J-102X	MG R	1kΩ 1/10W	J	*
R1234	NRSA02J-821X	MG R	820Ω 1/10W	J	*
R1235	NRSA02J-562X	MG R	5.6kΩ 1/10W	J	*
R1236	NRSA02J-105X	MG R	1MΩ 1/10W	J	*
R1237	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J	*
R1238	NRSA02J-682X	MG R	6.8kΩ 1/10W	J	*
R1241	NRSA02J-472X	MG R	4.7kΩ 1/10W	J	*
R1242	NRSA02J-392X	MG R	3.9kΩ 1/10W	J	*
R1243	NRSA02J-182X	MG R	1.8kΩ 1/10W	J	*
R1245	NRSA02J-471X	MG R	470Ω 1/10W	J	*
R1246	NRSA02J-392X	MG R	3.9kΩ 1/10W	J	*
R1247	NRSA02J-471X	MG R	470Ω 1/10W	J	*
R1248	NRSA02J-332X	MG R	3.3kΩ 1/10W	J	*
R1251	NRVA02D-102X	MF R	1kΩ 1/10W	D	*
R1252	NRVA02D-681X	MF R	680Ω 1/10W	D	*
R1253	NRSA02J-183X	MG R	18kΩ 1/10W	J	*
R1254	NRSA02J-105X	MG R	1MΩ 1/10W	J	*
R1255	NRSA02J-124X	MG R	120kΩ 1/10W	J	*
R1261	NRSA02J-103X	MG R	10kΩ 1/10W	J	*
R1262	NRSA02J-222X	MG R	2.2kΩ 1/10W	J	*
R1263	NRSA02J-101X	MG R	100Ω 1/10W	J	*
R1271	NRSA02J-561X	MG R	560Ω 1/10W	J	*
R1272	NRSA02J-102X	MG R	1kΩ 1/10W	J	*
R1273	NRSA02J-152X	MG R	1.5kΩ 1/10W	J	*
R1274-75	NRSA02J-223X	MG R	22kΩ 1/10W	J	*
R1276	NRSA02J-222X	MG R	2.2kΩ 1/10W	J	*
R1277	NRSA02J-471X	MG R	470Ω 1/10W	J	*
R1278	NRSA02J-122X	MG R	1.2kΩ 1/10W	J	*
R1279	NRSA02J-152X	MG R	1.5kΩ 1/10W	J	*
R1280-83	NRSA02J-222X	MG R	2.2kΩ 1/10W	J	*
R1301-02	NRSA02J-472X	MG R	4.7kΩ 1/10W	J	*
R1401	NRVA02D-472X	MF R	4.7kΩ 1/10W	D	*
R1421	NRSA02J-562X	MG R	5.6kΩ 1/10W	J	*
R1423-24	NRSA02J-223X	MG R	22kΩ 1/10W	J	*
R1426	NRSA02J-822X	MG R	8.2kΩ 1/10W	J	*
R1427	QRT029J-1R0	MF R	1.0Ω 2W	J	*
R1429	NRSA02J-103X	MG R	10kΩ 1/10W	J	*
R1430	NRSA02J-183X	MG R	18kΩ 1/10W	J	*
R1431	NRSA02J-152X	MG R	1.5kΩ 1/10W	J	*
R1432	NRSA02J-101X	MG R	100Ω 1/10W	J	*
R1433	NRSA02J-471X	MG R	470Ω 1/10W	J	*
R1434	QRG01GJ-221	OM R	220Ω 1W	J	*
R1435	QRE121J-102Y	C R	1kΩ 1/2W	J	*
R1501	QRK129J-151	C R	150Ω 1/2W	J	*
R1502	NRSA02J-101X	MG R	100Ω 1/10W	J	*
R1503	NRSA02J-103X	MG R	10kΩ 1/10W	J	*

△ Symbol No. Part No. Part Name Description Local

### RESISTOR

R1504	NRSA02J-561X	MG R	560Ω 1/10W	J	*
R1505	NRSA02J-473X	MG R	47kΩ 1/10W	J	*
R1506	NRSA02J-101X	MG R	100Ω 1/10W	J	*
R1507	NRSA02J-681X	MG R	680Ω 1/10W	J	*
R1508-09	NRSA02J-102X	MG R	1kΩ 1/10W	J	*
R1510	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J	*
R1511	NRSA02J-152X	MG R	1.5kΩ 1/10W	J	*
R1512	NRSA02J-563X	MG R	56kΩ 1/10W	J	*
R1521	NRSA02J-331X	MG R	330Ω 1/10W	J	*
R1522	NRSA02J-271X	MG R	270Ω 1/10W	J	*
R1523	QRE121J-103Y	C R	10kΩ 1/2W	J	*
R1524	QRL039J-182	OM R	1.8kΩ 3W	J	*
R1525	QRL039J-152	OM R	1.5kΩ 3W	J	*
R1531	QRE121J-220Y	C R	22Ω 1/2W	J	*
R1532	QRE121J-681Y	C R	680Ω 1/2W	J	*
R1533	QRL039J-103	OM R	10kΩ 3W	J	*
△ R1541	QRK129J-150	C R	15Ω 1/2W	J	*
R1542	QRX01GJ-1R2	MF R	1.2Ω 1W	J	*
△ R1544	QRZ9017-4R7	F R	4.7Ω 1/4W	J	*
R1545	QRE121J-822Y	C R	8.2kΩ 1/2W	J	*
R1547	QRE121J-184Y	C R	180kΩ 1/2W	J	*
R1548	QRE121J-184Y	C R	180kΩ 1/2W	J	*
R1553	NRSA02J-333X	MG R	33kΩ 1/10W	J	*
△ R1556	QRA14CF-6341Y	MF R	6.34kΩ 1/4W	F	*
△ R1557	QRA14CF-3301Y	MF R	3.3kΩ 1/4W	F	*
R1558	NRSA02J-333X	MG R	33kΩ 1/10W	J	*
R1559	NRSA02J-123X	MG R	12kΩ 1/10W	J	*
R1560	NRSA02J-273X	MG R	27kΩ 1/10W	J	*
R1561	NRSA02J-103X	MG R	10kΩ 1/10W	J	*
R1582	NRSA02J-331X	MG R	330Ω 1/10W	J	*
R1583	NRSA02J-223X	MG R	22kΩ 1/10W	J	*
R1584	NRSA02J-821X	MG R	820Ω 1/10W	J	*
R1585	QRE121J-392Y	C R	3.9kΩ 1/2W	J	*
R1586	QRE121J-682Y	C R	6.8kΩ 1/2W	J	*
R1587	QRE121J-822Y	C R	8.2kΩ 1/2W	J	*
R1588	QRL039J-270	OM R	27Ω 3W	J	*
R1601	NRSA02J-682X	MG R	6.8kΩ 1/10W	J	*
R1602	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J	*
R1603	NRSA02J-682X	MG R	6.8kΩ 1/10W	J	*
R1604	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J	*
R1605	QRT029J-R15	MF R	0.15Ω 2W	J	*
R1606-07	NRSA02J-223X	MG R	22kΩ 1/10W	J	*
R1611	NRSA02J-333X	MG R	33kΩ 1/10W	J	*
R1612	NRSA02J-223X	MG R	22kΩ 1/10W	J	*
R1615-16	NRSA02J-821X	MG R	820Ω 1/10W	J	*
R1617	NRSA02J-102X	MG R	1kΩ 1/10W	J	*
R1701	NRSA02J-102X	MG R	1kΩ 1/10W	J	*
R1704	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J	*
R1705	NRSA02J-103X	MG R	10kΩ 1/10W	J	*
R1706	NRSA02J-223X	MG R	22kΩ 1/10W	J	*
R1708	NRSA02J-223X	MG R	22kΩ 1/10W	J	*
R1710	NRSA02J-331X	MG R	330Ω 1/10W	J	*
R1714-16	NRSA02J-222X	MG R	2.2kΩ 1/10W	J	*
R1717	NRSA02J-331X	MG R	330Ω 1/10W	J	*
R1718	NRSA02J-222X	MG R	2.2kΩ 1/10W	J	*
R1719	NRSA02J-331X	MG R	330Ω 1/10W	J	*
R1720	NRSA02J-222X	MG R	2.2kΩ 1/10W	J	*
R1721	NRSA02J-331X	MG R	330Ω 1/10W	J	*
R1724	NRSA02J-102X	MG R	1kΩ 1/10W	J	*
R1725	NRSA02J-104X	MG R	100kΩ 1/10W	J	*
R1726-27	NRSA02J-682X	MG R	6.8kΩ 1/10W	J	*
R1728-29	NRSA02J-332X	MG R	3.3kΩ 1/10W	J	*
R1730-31	NRSA02J-101X	MG R	100Ω 1/10W	J	*
R1732	NRSA02J-224X	MG R	220kΩ 1/10W	J	*



△ Symbol No.	Part No.	Part Name	Description	Local
<b>RESISTOR</b>				
R1733-34	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1736	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1739	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1741	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1742	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R1743	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1744	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1745	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1746	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1747	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1748	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1749	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1750	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1753-54	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1756	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1757-58	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1759	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1772	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1773	NRSA02J-121X	MG R	120Ω 1/10W J	*
R1775	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1777	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1791-95	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1801-04	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1805-07	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1821	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1822	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R1823	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R1824	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R1825	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1826	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1831	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1832	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1833-34	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1835-36	NRSA02J-473X	MG R	47kΩ 1/10W J	*
△ R1901	QRF074K-R47	UNF R	0.47 Ω 7W K	*
R1902	QRE121J-333Y	C R	33kΩ 1/2W J	*
R1903	NRSA02J-681X	MG R	680Ω 1/10W J	*
R1904-05	QRT029J-R22	MF R	0.22Ω 2W J	*
R1909	QRE121J-332Y	C R	3.3kΩ 1/2W J	*
R1912-13	QRE121J-333Y	C R	33kΩ 1/2W J	*
R1914	QRE121J-2R2Y	C R	2.2Ω 1/2W J	*
R1916	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1917	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1918	NRSA02J-182X	MG R	1.8kΩ 1/10W J	*
R1919	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1920	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1924	QRG016J-221	OM R	220Ω 1W J	*
R1925	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1926	QRT029J-R82	MF R	0.82Ω 2W J	*
R1928	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1931	NRSA02J-123X	MG R	12kΩ 1/10W J	*
R1933	NRSA02J-123X	MG R	12kΩ 1/10W J	*
R1934	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1936	QRE121J-222Y	C R	2.2kΩ 1/2W J	*
R1937	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1940	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1941	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1942	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1943	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1944	NRSA02J-393X	MG R	39kΩ 1/10W J	*
R1945-46	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1947	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1948	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1949	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1951-52	QRT029J-1R2	MF R	1.2Ω 2W J	*
R1954	QRE121J-272Y	C R	2.7kΩ 1/2W J	*
R1955	QRE121J-473Y	C R	47kΩ 1/2W J	*
R1956	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1958-59	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1961	QRJ146J-3R3X	C R	3.3Ω 1/4W J	*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>RESISTOR</b>				
R1962	QRL029J-472	OM R	4.7kΩ 2W J	*
R1963	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1966	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1967	QRE121J-683Y	C R	68kΩ 1/2W J	*
R1971	QRL029J-330	OM R	33Ω 2W J	*
<b>CAPACITOR</b>				
C1001	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1003	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1004	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1005	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1006	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1007	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1009	NDC21HJ-151X	C CAP.	150pF 50V J	*
C1011	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1201	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1205	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1206	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1207	QETN1CM-108Z	E CAP.	1000μF 16V M	*
C1208	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1225	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1231	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1233	NCB21HK-682X	C CAP.	6800pF 50V K	*
C1234	NCB21EK-683X	C CAP.	0.068μF 25V K	*
C1235	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1241	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1242	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1243	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1251	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1252	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1253	QETN1HM-225Z	E CAP.	2.2μF 50V M	*
C1254	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1255	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1256	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1271	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1281	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1283-87	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1288-89	QENC1CM-106Z	BP E CAP.	10μF 16V M	*
C1301	NDC21HJ-9R0X	C CAP.	9.0pF 50V J	*
C1302	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1303	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
C1304	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1305	NDC21HJ-180X	C CAP.	180pF 50V J	*
C1306	NDC21HJ-101X	C CAP.	100pF 50V J	*
C1307	QETN1AM-108Z	E CAP.	1000μF 10V M	*
C1308	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1309	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1402	QFV71HJ-334Z	MF CAP.	0.33μF 50V J	*
C1403	QFV71HJ-394Z	MF CAP.	0.39μF 50V J	*
C1422	QFLC1HJ-103Z	M CAP.	0.01μF 50V J	*
C1424	QETN1VM-107Z	E CAP.	100μF 35V M	*
C1425	QETN1VM-477Z	E CAP.	470μF 35V M	*
C1427	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1428	QETN1EM-228	E CAP.	2200μF 25V M	*
C1431	QFLC1HJ-563Z	M CAP.	0.056μF 50V J	*
C1432	QETN1HM-476Z	E CAP.	47μF 50V M	*
C1433	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1434	NDC21HJ-100X	C CAP.	10pF 50V J	*
C1435	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1436	QFN32AK-224	M CAP.	0.22μF 100V K	*
C1501	QETN1CM-337Z	E CAP.	330μF 16V M	*
C1502	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1503	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1504	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1505	NCB21HK-333X	C CAP.	0.033μF 50V K	*
C1506	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1507	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1508	NDC21HG-201X	CHIP C CAP.	200pF 50V G	*
C1510	QETN1HM-225Z	E CAP.	2.2μF 50V M	*

AV-27D200(US&amp;CA)

△ Symbol No.	Part No.	Part Name	Description	Local
<b>CAPACITOR</b>				
C1521	QCB32HK-151Z	C CAP.	150pF 500V K	*
C1522	QCB32HK-331Z	C CAP.	330pF 500V K	*
C1523	QETN2CM-105Z	E CAP.	1μF 160V M	*
△ C1531	QFZ0117-4701	MPP CAP.	4700pF 1.4kVH±2.5%	*
△ C1532	QFZ0117-1302	MPP CAP.	0.013μF 1.4kVH±2.5%	*
△ C1533	QFP32GJ-223	PP CAP.	0.022μF 400V J	*
C1534	QEHR2EM-225Z	E CAP.	2.2μF 250V M	*
△ C1535	QFZ0119-624	MPP CAP.	0.62μF 200V ±3%	*
C1536	QCB32HK-561Z	C CAP.	560pF 500V K	*
C1538	QE20420-107	E CAP.	100μF 160V M	*
C1541	QETN2EM-106Z	E CAP.	10μF 250V M	*
C1542	QETN1VM-108	E CAP.	1000μF 35V M	*
C1544	QETN1VM-107Z	E CAP.	100μF 35V M	*
C1545	QFLC2AJ-103Z	M CAP.	0.01μF 100V J	*
C1546	QFV71HJ-684Z	MF CAP.	0.68μF 50V J	*
C1551	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1578-79	QEM61HK-475Z	E CAP.	4.7μF 50V K	*
C1602	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1604	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1605	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1606	QETN1EM-108Z	E CAP.	1000μF 25V M	*
C1607	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1608-09	QETN1EM-108Z	E CAP.	1000μF 25V M	*
C1613	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1615-17	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1701	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1703	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1704	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1705	NDC21HJ-181X	C CAP.	180pF 50V J	*
C1706	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1708	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1709	NDC21HJ-221X	C CAP.	220pF 50V J	*
C1710-11	NDC21HJ-390X	C CAP.	39pF 50V J	*
C1712	NDC21HJ-270X	C CAP.	27pF 50V J	*
C1714	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1715	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1716	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1717-18	NDC21HJ-330X	C CAP.	33pF 50V J	*
C1719	NDC21HJ-471X	C CAP.	470pF 50V J	*
C1720-21	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1736	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1741	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1743	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1744	NRSA02J-OR0X	MG R	0.0Ω 1/10W J	*
C1746	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1771	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1772	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1773	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1774	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1784	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1801-03	QETN1HM-105Z	E CAP.	1μF 50V M	*
△ C1906	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1907	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1908	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1910	QE20169-477	E CAP.	470μF 200V M	*
C1911	QETN1VM-477Z	E CAP.	470μF 35V M	*
C1912	QFN31HJ-102Z	M CAP.	1000pF 50V J	*
C1913	QCZ0131-102	C CAP.	1000pF 2000V K	*
C1914	QCZ0325-391	C CAP.	390pF 2000V K	*
C1918	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1919	NCB21HK-272X	C CAP.	2700pF 50V K	*
C1920	QFLC1HJ-823Z	M CAP.	0.082μF 50V J	*
C1921	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1923	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1924	QE20420-107	E CAP.	100μF 160V M	*
C1925	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1926	QETN1VM-108	E CAP.	1000μF 35V M	*
C1927	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1928	QETN1EM-108Z	E CAP.	1000μF 25V M	*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>CAPACITOR</b>				
C1931-32	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1933	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1934	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1935	QETN1HM-107Z	E CAP.	100μF 50V M	*
C1937	QETN2CM-106Z	E CAP.	10μF 160V M	*
C1938	NDC21HJ-471X	C CAP.	470pF 50V J	*
C1951	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1952	QETN1HM-476Z	E CAP.	47μF 50V M	*
C1954	QETN1HM-226Z	E CAP.	22μF 50V M	*
C1971	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1972	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1973	QETN1CM-108Z	E CAP.	1000μF 16V M	*
△ C1990	QCZ9074-103	C CAP.	0.01μFAC125V M	*
△ C1991	QCZ9074-103	C CAP.	0.01μFAC125V M	*

**TRANSFORMER**

T1521	CE42034-002	H.DRIVE TRANSF.	*
△ T1522	QQH0051-001	F B T	*
△ T1901	CETS124-001J8	SW TRANSF.	*

**COIL**

L1002	QQL29BJ-101Z	PEAKING COIL	100μH	*
L1201	QQL29BJ-220Z	PEAKING COIL	22μH	*
△ L1531	CE41345-00A	LINEARITY COIL	*	*
L1532	QQL2016-821	CHOKE COIL	*	*
△ L1591	QQL2018-220	HEATER CHOKE	*	*
L1701	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L1702	QQL244J-100Z	COIL	10μH	*
L1771	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L1921-22	QQL42AK-820Z	COIL	82μH	*

**DIODE**

D1001	MTZJ33A-T2	ZENER DIODE	*
D1241-42	1S5133-T2	SI.DIODE	*
D1244-45	1S5133-T2	SI.DIODE	*
D1421	1N4003-T2	SI.DIODE	*
D1422	MTZJ75-T2	ZENER DIODE	*
D1501	1S5133-T2	SI.DIODE	*
D1502-03	MTZJ6.2B-T2	ZENER DIODE	*
D1504	MTZJ5.1B-T2	ZENER DIODE	*
D1531	RH3G-F1	SI.DIODE	*
D1532	RU3AM-LFC4	SI.DIODE	*
D1533	RGP10J-5025-T3	SI.DIODE	*
D1541	RH1S-T3	SI.DIODE	*
D1542	RGP10J-5025-T3	SI.DIODE	*
D1544	1S581-T2	SI.DIODE	*
D1546	1SR124-400A-T2	SI.DIODE	*
D1547	1S581-T2	SI.DIODE	*
D1549	MTZJ5.1B-T2	ZENER DIODE	*
△ D1551	MA4068N/Z1/-T2	ZENER DIODE	*
D1560-61	1S5133-T2	SI.DIODE	*
D1601-02	1S5133-T2	SI.DIODE	*
D1608-10	1S5133-T2	SI.DIODE	*
D1701-03	1S5133-T2	SI.DIODE	*
D1741-42	1S5133-T2	SI.DIODE	*
D1771-72	1S5133-T2	SI.DIODE	*
D1831-32	1S5133-T2	SI.DIODE	*
△ D1901	D3SBA60-S1	BRIDGE DIODE	*
D1902	RGP10J-5025-T3	SI.DIODE	*
D1903-04	1S5133-T2	SI.DIODE	*
D1909	MTZJ15A-T2	ZENER DIODE	*
D1910	RGP10J-5025-T3	SI.DIODE	*
D1911	1S5133-T2	SI.DIODE	*
D1912	MTZJ15A-T2	ZENER DIODE	*
D1913-14	RGP10J-5025-T3	SI.DIODE	*
D1916	RGP10J-5025-T3	SI.DIODE	*

Symbol No.	Part No.	Part Name	Description	Local
------------	----------	-----------	-------------	-------

**DIODE**

D1918	MTZJ15A-T2	ZENER DIODE		*
D1919-20	1SS133-T2	SI. DIODE		*
D1921	RU30A-F1	SI. DIODE		*
D1922-23	RU3YX-LFC4	SI. DIODE		*
D1925	RGP10J-5025-T3	SI. DIODE		*
D1926-28	1SS133-T2	SI. DIODE		*
D1931	1SS133-T2	SI. DIODE		*
D1933	1SS133-T2	SI. DIODE		*
D1942	MTZJ6.8A-T2	ZENER DIODE		*
D1951	MTZJ7.55-T2	ZENER DIODE		*

**TRANSISTOR**

Q1001	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1201	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1203-04	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1205	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1231	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1241-42	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1261	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1271-74	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1521	2SC4212/Z1/	SI. TRANSISTOR		*
Q1531	2SD2539-LB	SI. TRANSISTOR	H. OUT	*
Q1541	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1542	2SC2785/JH/-T	SI. TRANSISTOR		*
Q1551-52	2SA1309A/QR/-T	SI. TRANSISTOR		*
Q1553	2SD1408/OY/-LB	SI. TRANSISTOR		*
Q1602	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1603	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1604	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1741-42	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1743-44	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1821	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1822-23	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1831	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1832	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1911	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1912	2SD2088-T	SI. TRANSISTOR		*
Q1921	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1922	2SD1383K/AB/-X	SI. TRANSISTOR		*
Q1923	2SA1020/Y/-T	SI. TRANSISTOR		*
Q1924	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1925	2SA949/Y/Z1-T	SI. TRANSISTOR		*
Q1926	2SC2240/GL/-T	SI. TRANSISTOR		*
Q1927-28	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1942	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1943	2SC2240/GL/-T	SI. TRANSISTOR		*
Q1944	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1951	2SA949/Y/Z1-T	SI. TRANSISTOR		*

**IC**

IC1001	BA17805T	I. C. (MONO-ANA)		*
IC1201	JCC1007A	I. C. (MONO-ANA)		*
IC1281	MS2055FP-X	I. C. (MONO-ANA)		*
IC1421	LA7841	I. C. (MONO-ANA)		*
IC1423	AN78L09-T	I. C. (MONO-ANA)		*
IC1601	LA4485	I. C. (MONO-ANA)		*
IC1701	MN1874878JR	I. C.		*
IC1702	AT24C02-27D500	I. C.	(SERVICE)	*
IC1703	MN1381/Q/-T	I. C. (MONO-ANA)		*
IC1771	AN77L05-T	I. C. (MONO-ANA)		*
IC1901	STR-F6626	I. C. (HYBRID)		*
IC1941	SE135N	I. C. (HYBRID)		*
IC1971	BA17809T	I. C. (MONO-ANA)		*

Symbol No.	Part No.	Part Name	Description	Local
------------	----------	-----------	-------------	-------

**OTHERS**

CF1001	QAX0349-001	CERAMIC TRAP		*
CF1501	CSB503F39	CER. RESONATOR		*
CF1701	FCR12.0M2S	CER. RESONATOR		*
K1421	CE42050-001Z	CORE		*
K1901-03	CE41433-001Z	BEADS CORE		*
K1905-06	CE41433-001Z	BEADS CORE		*
K1921-24	CE41433-001Z	BEADS CORE		*
PC1901	TLP621(B)	I. C. (PH. COUPLER)		*
PC1902	TLP621(B)	I. C. (PH. COUPLER)		*
RY1901	CESK028-001	RELAY		*
RY1921	CESK028-001	RELAY		*
S1421	QSL4A13-C02	LEVER SWITCH	V SENTER	*
TH1901	CEKP007-002	P. THERMISTOR		*
TU1001	QAU0133-001	TUNER		*
W1295	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1297	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1300	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1667-68	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1677	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1691-96	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1718-21	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1763-65	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1770	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1820	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1827-28	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1834	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1856	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1878-79	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1885	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1892	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1900	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1902	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
X1301	QAX0310-001Z	CRYSTAL		*
Y1604	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1709	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1711	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1721-22	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*

AV-27D200(US&amp;CA)

**CRT SOCKET P.W. BOARD ASS'Y  
(SGR-3001A-M2)**

Δ Symbol No.	Part No.	Part Name	Description	Local
<b>RESISTOR</b>				
R3351-56	NRSA02J-221X	MG R	220Ω 1/10W J	*
R3357-59	NRSA02J-101X	MG R	100Ω 1/10W J	*
R3360-62	QRZ0111-152	C R	1500pF 1/2W K	*
R3363	QRG029J-103	OM R	10kΩ 2W J	*
R3364-65	QRG029J-103	OM R	10kΩ 2W J	*
R3366-68	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
R3369-71	NRSA02J-101X	MG R	100Ω 1/10W J	*
R3381	QRE121J-394Y	C R	390kΩ 1/2W J	*
<b>CAPACITOR</b>				
C3354-55	NCS21HJ-331X	C CAP.	330pF 50V J	*
C3356	NCS21HJ-391X	C CAP.	390pF 50V J	*
C3357	QETN1CM-107Z	E CAP.	100μF 16V M	*
Δ C3382	QCZ0121-102	C CAP.	1000pF 3000V Z	*
<b>COIL</b>				
L3381	QQL39BK-101Z	COIL	100μH	*
<b>TRANSISTOR</b>				
Q3351-53	2SC4544-LB	SI. TRANSISTOR		*
Q3354-56	2SC2412K/QR/-X	SI. TRANSISTOR		*
<b>OTHERS</b>				
Δ SK3351	CE42535-001J1	C. R. T. SOCKET		
W3002	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W3006	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*

**FRONT CONTROL P.W. BOARD ASS'Y  
(SGR-4001A-M2)**

Δ Symbol No.	Part No.	Part Name	Description	Local
<b>RESISTOR</b>				
R4701	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R4702	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R4703	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R4704	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R4705	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R4706	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R4707	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R4708	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R4709	NRSA02J-561X	MG R	560Ω 1/10W J	*
<b>CAPACITOR</b>				
C4841	QETN1CM-476Z	E CAP.	47μF 16V M	*
<b>DIODE</b>				
D4701	SLR-342VR3F	L. E. D.		*
<b>TRANSISTOR</b>				
Q4701-02	DTA124EKA-X	DIGI. TRANSISTOR		*
<b>IC</b>				
IC4841	GPIU281Q	IFR DETECT UNIT		*
<b>OTHERS</b>				
	LC30190-001B-A	LED HOLDER		*
S4702	QSW0619-003Z	PUSH SWITCH	MENU	*
S4703	QSW0619-003Z	PUSH SWITCH	CH -	*
S4704	QSW0619-003Z	PUSH SWITCH	CH +	*
S4705	QSW0619-003Z	PUSH SWITCH	VOL -	*
S4706	QSW0619-003Z	PUSH SWITCH	VOL +	*
S4707	QSW0619-003Z	PUSH SWITCH	POWER	*
W4001-02	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*

# AV SELECTOR P.W. BOARD ASS'Y (SGR-8001A-M2)

△ Symbol No. Part No. Part Name Description Local

## RESISTOR

R8181	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8182	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R8183	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R8184	NRSA02J-683X	MG R	68kΩ 1/10W J	*
R8185	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R8186	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R8187	NRVA02D-153X	MF R	15kΩ 1/10W D	*
R8188	NRVA02D-152X	MF R	1.5kΩ 1/10W D	*
R8189	NRSA02J-512X	MG R	5.1kΩ 1/10W J	*
R8202	NRSA02J-101X	MG R	100Ω 1/10W J	*
R8203	NRSA02J-562X	MG R	5.6kΩ 1/10W J	*
R8204	NRSA02J-101X	MG R	100Ω 1/10W J	*
R8210	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
R8211	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R8212	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R8213	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8214	NRSA02J-181X	MG R	180Ω 1/10W J	*
R8215	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R8216-17	NRSA02J-182X	MG R	1.8kΩ 1/10W J	*
R8218	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8223	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
R8224-25	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R8226	NRSA02J-101X	MG R	100Ω 1/10W J	*
R8227	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R8229	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R8230	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R8231	NRSA02J-101X	MG R	100Ω 1/10W J	*
R8232-33	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8234	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R8235-36	NRSA02J-101X	MG R	100Ω 1/10W J	*
R8237	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8241	NRSA02J-821X	MG R	820Ω 1/10W J	*
R8251	NRSA02J-471X	MG R	470Ω 1/10W J	*
R8255	NRSA02J-471X	MG R	470Ω 1/10W J	*
R8256	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R8257	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R8258	NRSA02J-101X	MG R	100Ω 1/10W J	*
R8259	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R8271	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
R8275	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R8276	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
R8301	NRSA02J-221X	MG R	220Ω 1/10W J	*
R8303	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8304	NRSA02J-101X	MG R	100Ω 1/10W J	*
R8305	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R8306	NRSA02J-471X	MG R	470Ω 1/10W J	*
R8308	NRSA02J-331X	MG R	330Ω 1/10W J	*
R8310-11	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R8371	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8372	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R8375	NRSA02J-183X	MG R	18kΩ 1/10W J	*
R8376	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R8377	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R8378	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
R8631-34	NRSA02J-101X	MG R	100Ω 1/10W J	*
R8651-54	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R8655	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
R8657	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
R8659	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R8671-74	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R8675-76	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R8677-78	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R8681	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R8682	NRSA02J-223X	MG R	22kΩ 1/10W J	*

△ Symbol No. Part No. Part Name Description Local

## RESISTOR

R8684-87	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R8691-92	NRSA02J-221X	MG R	220Ω 1/10W J	*
R8693-94	NRSA02J-823X	MG R	82kΩ 1/10W J	*
R8695-96	NRSA02J-221X	MG R	220Ω 1/10W J	*
R8801-03	NRSA02J-820X	MG R	82Ω 1/10W J	*
R8804-05	NRSA02J-823X	MG R	82kΩ 1/10W J	*
R8808	NRSA02J-820X	MG R	82Ω 1/10W J	*
R8809-10	NRSA02J-823X	MG R	82kΩ 1/10W J	*
R8811-14	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8818	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8819	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R8820	NRSA02J-183X	MG R	18kΩ 1/10W J	*
R8822	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
R8823	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R8829	NRSA02J-683X	MG R	68kΩ 1/10W J	*
R8831	NRSA02J-821X	MG R	820Ω 1/10W J	*
R8832-33	NRSA02J-182X	MG R	1.8kΩ 1/10W J	*
R8835	NRSA02J-273X	MG R	27kΩ 1/10W J	*
R8836	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R8837	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R8851	NRSA02J-562X	MG R	5.6kΩ 1/10W J	*
R8852	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R8861-63	NRSA02J-820X	MG R	82Ω 1/10W J	*
R8864-65	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R8866-67	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R8868-69	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R8870-71	NRSA02J-271X	MG R	270Ω 1/10W J	*
R8872-73	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R8874-75	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*

## CAPACITOR

C8181	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C8182	QENC1HM-475Z	BP E CAP.	4.7μF 50V M	*
C8183	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
C8184	QETN1HM-225Z	E CAP.	2.2μF 50V M	*
C8185	NCB21HK-473X	C CAP.	0.047μF 50V K	*
C8186	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C8187-88	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C8189	QBTC1CK-335Z	TAN. CAP.	3.3μF 16V K	*
C8190	QETN1HM-105Z	E CAP.	1μF 50V M	*
C8191	QBTC1CK-106Z	TAN. CAP.	10μF 16V K	*
C8192-93	QETN1HM-105Z	E CAP.	1μF 50V M	*
C8194	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C8195	QETN1HM-105Z	E CAP.	1μF 50V M	*
C8201	QETN1CM-107Z	E CAP.	100μF 16V M	*
C8203	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8204	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8208	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8209	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8211	QENC1EM-106Z	BP E CAP.	10μF 25V M	*
C8212	NDC21HJ-101X	C CAP.	100pF 50V J	*
C8213	NDC21HJ-470X	C CAP.	47pF 50V J	*
C8214	NDC21HJ-181X	C CAP.	180pF 50V J	*
C8215	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C8222	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8224	NDC21HJ-100X	C CAP.	10pF 50V J	*
C8225-26	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8231-32	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8241-45	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8246	NDC21HJ-181X	C CAP.	180pF 50V J	*
C8247-49	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8251	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8252	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8255	NDC21HJ-390X	C CAP.	39pF 50V J	*

AV-27D200(US&amp;CA)

△ Symbol No. Part No. Part Name Description Local

**CAPACITOR**

C8304	NDC21HJ-560X	C CAP.	56pF 50V J	*
C8306	NDC21HJ-820X	C CAP.	82pF 50V J	*
C8307	NDC21HJ-271X	C CAP.	270pF 50V J	*
C8308	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8371	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8375	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8631	QETN1CM-107Z	E CAP.	100μF 16V M	#
C8632	NCB21HK-103X	C CAP.	0.01μF 50V K	#
C8633	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8634	NCB21HK-273X	C CAP.	0.027μF 50V K	*
C8635	QETN1HM-225Z	E CAP.	2.2μF 50V M	*
C8636	NCB21HK-222X	C CAP.	2200pF 50V K	*
C8637	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C8638	QETN1HM-225Z	E CAP.	2.2μF 50V M	*
C8639	NCB21HK-222X	C CAP.	2200pF 50V K	*
C8640	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C8643	QETN1HM-105Z	E CAP.	1μF 50V M	*
C8651-52	QENC1HM-105Z	BP E CAP.	1μF 50V M	#
C8653-54	NCB21HK-332X	C CAP.	3300pF 50V K	#
C8655-56	NCB21HK-333X	C CAP.	0.033μF 50V K	*
C8657-58	QETN1HM-106Z	E CAP.	10μF 50V M	*
C8659	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8660	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C8671-72	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
C8673	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8691-92	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C8811-14	QETN1HM-105Z	E CAP.	1μF 50V M	*
C8821	QETN1HM-106Z	E CAP.	10μF 50V M	*
C8822	QETN1CM-107Z	E CAP.	100μF 16V M	*
C8825-27	QETN1HM-106Z	E CAP.	10μF 50V M	*
C8831	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8832	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C8833	QETN1HM-106Z	E CAP.	10μF 50V M	*
C8835-36	QETN1CM-476Z	E CAP.	47μF 16V M	*
C8861-64	QETN1HM-106Z	E CAP.	10μF 50V M	*
C8865-66	NDC21HJ-270X	C CAP.	27pF 50V J	*
C8867-68	QETN1HM-106Z	E CAP.	10μF 50V M	*

**COIL**

L8201	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	#
L8202	QQL29BJ-150Z	PEAKING COIL	15μH	*
L8211	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L8241	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L8251	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L8301	QQL29BJ-150Z	PEAKING COIL	15μH	*
L8302	QQL29BJ-100Z	PEAKING COIL	10μH	*
L8801	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*

**DIODE**

D8691-92	MTZJ9.1C-T2	ZENER DIODE		*
D8703	MTZJ5.6B-T2	ZENER DIODE		*
D8811-22	MTZJ9.1C-T2	ZENER DIODE		*
D8861-66	MTZJ9.1C-T2	ZENER DIODE		*

**TRANSISTOR**

Q8201	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8211-12	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8217-18	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8219	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q8252	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q8253	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8271	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8301-02	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8304-05	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8371	2SC2412K/QR/-X	SI. TRANSISTOR		*

△ Symbol No. Part No. Part Name Description Local

**TRANSISTOR**

Q8681-82	DTC124EKA-X	DIGI. TRANSISTOR		*
Q8684-87	DTC323TK-X	DIGI. TRANSISTOR		*
Q8804-05	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8851-52	DTC124EKA-X	DIGI. TRANSISTOR		*
Q8861-62	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q8863-64	2SA1037AK/QR/-X	SI. TRANSISTOR		*

**IC**

IC8201	TC90A45P	I C		
IC8202	AN78L05-T	I.C. (MONO-ANA)		*
IC8631	UPC1851BCU	I.C. (MONO-ANA)		*
IC8651	NJM2150AD	I.C. (MONO-ANA)		*
IC8671	BA15218N	I.C. (MONO-ANA)		*
IC8681	TC4066BP	I.C. (DIGI-MOS)		*
IC8801	BA7649A	I C		*
IC8803	TC4066BP	I.C. (DIGI-MOS)		*

**OTHERS**

DL8861-62	CE41785-002	LOWPASS FILTER		*
J8801	QNZ0117-001	PIN JACK		*
J8802	QNN0182-001	PIN JACK		*
J8803	QNN0182-002	PIN JACK		*
J8804	QNN0181-001	PIN JACK		*
J8805	QNS0001-001	JACK		*
K8201	CE41433-001Z	BEADS CORE		*
K8242	CE41433-001Z	BEADS CORE		*
W8002	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W8005-06	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W8010	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W8013	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W8039	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W8041	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W8049	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W8052-54	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W8056	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*

**LINE FILTER P.W. BOARD ASS'Y (SGR-9001A-M2)**

△ Symbol No. Part No. Part Name Description Local

**RESISTOR**

△ R9998	QRZ9041-275	C R	2.7MΩ 1/2W K	*
R9999	QRE121J-121Y	C R	120Ω 1/2W J	*

**CAPACITOR**

△ C9901	QFZ9067-104	MPP CAP.	0.1μFAC275V M	*
△ C9902	QFZ9067-473	MPP CAP.	0.047μFAC275V M	*
△ C9903	QFZ9067-104	MPP CAP.	0.1μFAC275V M	*
△ C9904	QCZ9052-102	C CAP.	1000pFAC125V M	*

**OTHERS**

△ CN90PW	QMPD200-200-JC	POWER CORD		*
△ F9901	QMF0007-5R0J1	FUSE	5.0A	*
FC9901	CEMG002-001Z	FUSE CLIP		*
△ LF9901	CELF008-001J5	LINE FILTER		*
△ LF9902	CE42335-001J1	LINE FILTER		*
△ VA9901	ERZV10V361CS	VARIATOR		*

## IF P.W. BOARD ASS'Y( SGR0F001A-M2)

Symbol No.	Part No.	Part Name	Description	Local
------------	----------	-----------	-------------	-------

## RESISTOR

R0101	NRSA02J-562X	MG R	5.6KΩ 1/10W J	*
R0102	NRSA02J-182X	MG R	1.8KΩ 1/10W J	*
R0103	QRE121J-101Y	C R	100Ω 1/2W J	*
R0104	NRSA02J-180X	MG R	18Ω 1/10W J	*
R0105	NRSA02J-270X	MG R	27Ω 1/10W J	*
R0111-12	NRSA02J-154X	MG R	150KΩ 1/10W J	*
R0113	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0116	NRSA02J-680X	MG R	68Ω 1/10W J	*
R0117	NRSA02J-273X	MG R	27KΩ 1/10W J	*
R0118	NRSA02J-223X	MG R	22KΩ 1/10W J	*
R0131	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R0132	NRSA02J-331X	MG R	330Ω 1/10W J	*
R0133	NRSA02J-821X	MG R	820Ω 1/10W J	*
R0134	NRSA02J-391X	MG R	390Ω 1/10W J	*
R0135	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0161	NRSA02J-332X	MG R	3.3KΩ 1/10W J	*
R0162	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0163	NRSA02J-223X	MG R	22KΩ 1/10W J	*
R0164	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R0165	NRSA02J-223X	MG R	22KΩ 1/10W J	*
R0166	NRSA02J-103X	MG R	10KΩ 1/10W J	*
R0167	NRSA02J-102X	MG R	1KΩ 1/10W J	*
R0168	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0169	NRSA02J-561X	MG R	560Ω 1/10W J	*
R0171	NRSA02J-103X	MG R	10KΩ 1/10W J	*

## CAPACITOR

C0101-02	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0104-05	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0106	QETN1HM-476Z	E CAP.	47μF 50V M	*
C0107	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0113-14	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0116	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	*
C0117	QETN1EM-476Z	E CAP.	47μF 25V M	*
C0118	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0119	NDC21HJ-681X	C CAP.	680pF 50V J	*
C0120	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C0124	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0131	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0161	QETN1HM-106Z	E CAP.	10μF 50V M	*
C0163-64	NDC21HJ-470X	C CAP.	47pF 50V J	*
C0165-66	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0167	QENC1HM-105Z	BP E CAP.	1μF 50V M	*

Symbol No.	Part No.	Part Name	Description	Local
------------	----------	-----------	-------------	-------

## TRANSFORMER

T0111	QQR0907-001	I.F. TRANSFORMER		*
-------	-------------	------------------	--	---

## COIL

L0101	QQLZ014-R22	PEAKING COIL	0.22μH	*
L0113	QQL298J-4R7Z	PEAKING COIL	4.7μH	*
L0131	QQL298J-150Z	PEAKING COIL	15μH	*
L0161	QQL298J-220Z	PEAKING COIL	22μH	*

## TRANSISTOR

Q0101	2SC5083/L-P/-T	SI TRANSISTOR		*
Q0131	2SA1037AK/QR/-X	SI TRANSISTOR		*
Q0161	2SC2412K/QR/-X	SI TRANSISTOR		*

## IC

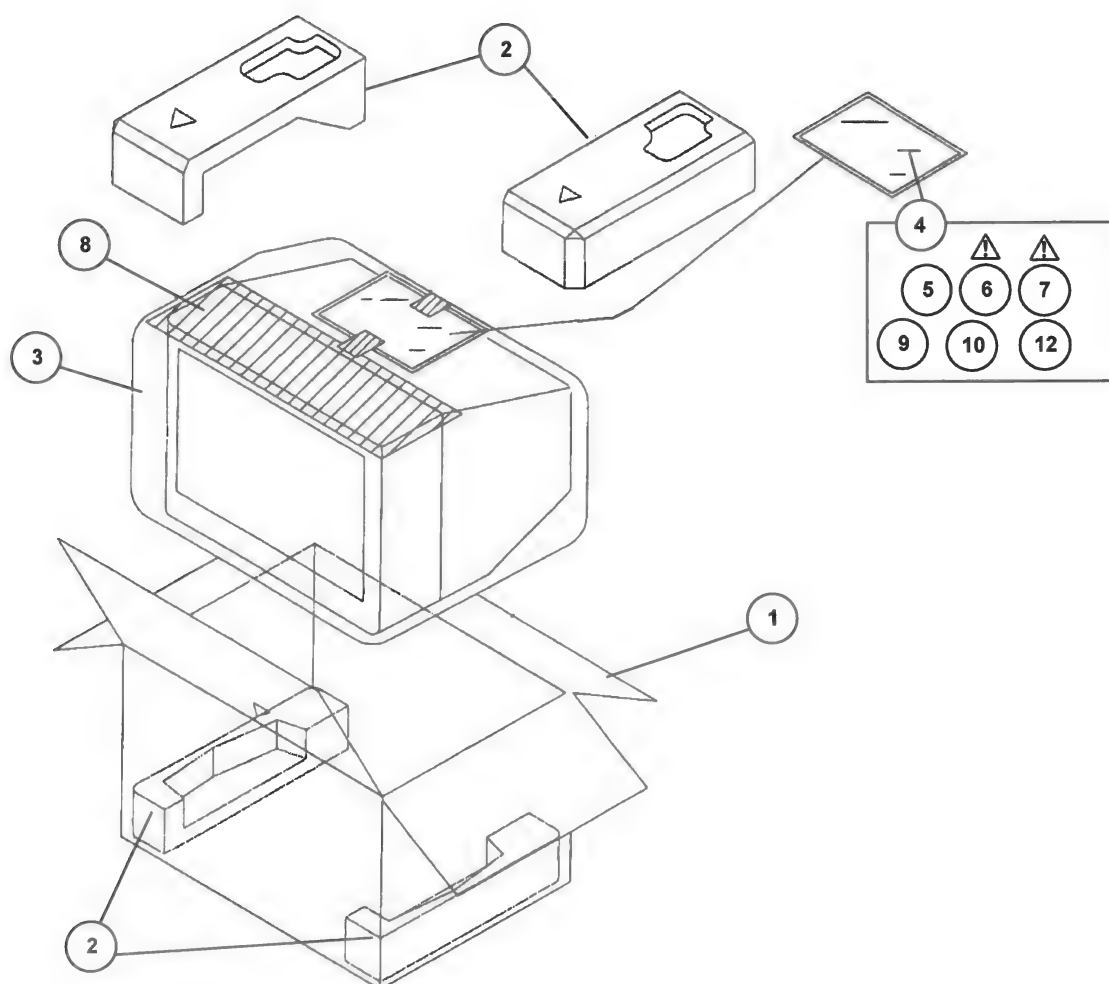
IC0101	M52342SP	I.C. (MONO-ANA)		
--------	----------	-----------------	--	--

## OTHERS

CF0131	QAX0339-001	CERAMIC FILTER		*
CF0161	SFSH4.5MCB	CERAMIC FILTER		*
SF0101	QAX0324-002	SAW FILTER		*
Y0002	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*

AV-27D200(US&amp;CA)

# PACKING



## PACKING PARTS LIST

△ Ref.No.	Part No.	Part Name	Description	Local
<b>[America Model]</b>				
1	LC10181-008A-A	PACKING CASE		*
2	LC10367-002A-A	CUSHION ASSY	4pcs in 1set	*
3	CP30056-008-A	POLY BAG		*
4	QPGA025-03505A	POLY BAG		*
5	RM-C342-1A	REMOCON UNIT		*
△ 6	LCT0328-001A-A	INST BOOK	[ENGLISH]	*
8	CP30055-001-A	TOP COVER		*
9	BT-51006-1Q	REGISTER CARD		*
10	LCT0414-001A-A	QUICK SETUP GUID	[ENGLISH]	*
<b>[Canada Model]</b>				
1	LC10181-008A-A	PACKING CASE		*
2	LC10367-002A-A	CUSHION ASSY	4pcs in 1set	*
3	CP30056-008-A	POLY BAG		*
4	QPGA025-03505A	POLY BAG		*
5	RM-C342-1A	REMOCON UNIT		*
△ 6	LCT0328-001A-A	INST BOOK	[ENGLISH]	*
△ 7	LCT0329-001A-A	INST BOOK	[FRENCH]	*
8	CP30055-001-A	TOP COVER		*
9	BT-51006-1Q	REGISTER CARD		*
10	LCT0414-001A-A	QUICK SETUP GUID	[ENGLISH]	*
12	LCT0415-001A-A	QUICK SETUP GUID	[FRENCH]	*



AV-27D200(US&CA)

## II. AV-32D200 (US&CA) / III. AV-32D200 (A US&A CA)

### EXPLODED VIEW PARTS LIST

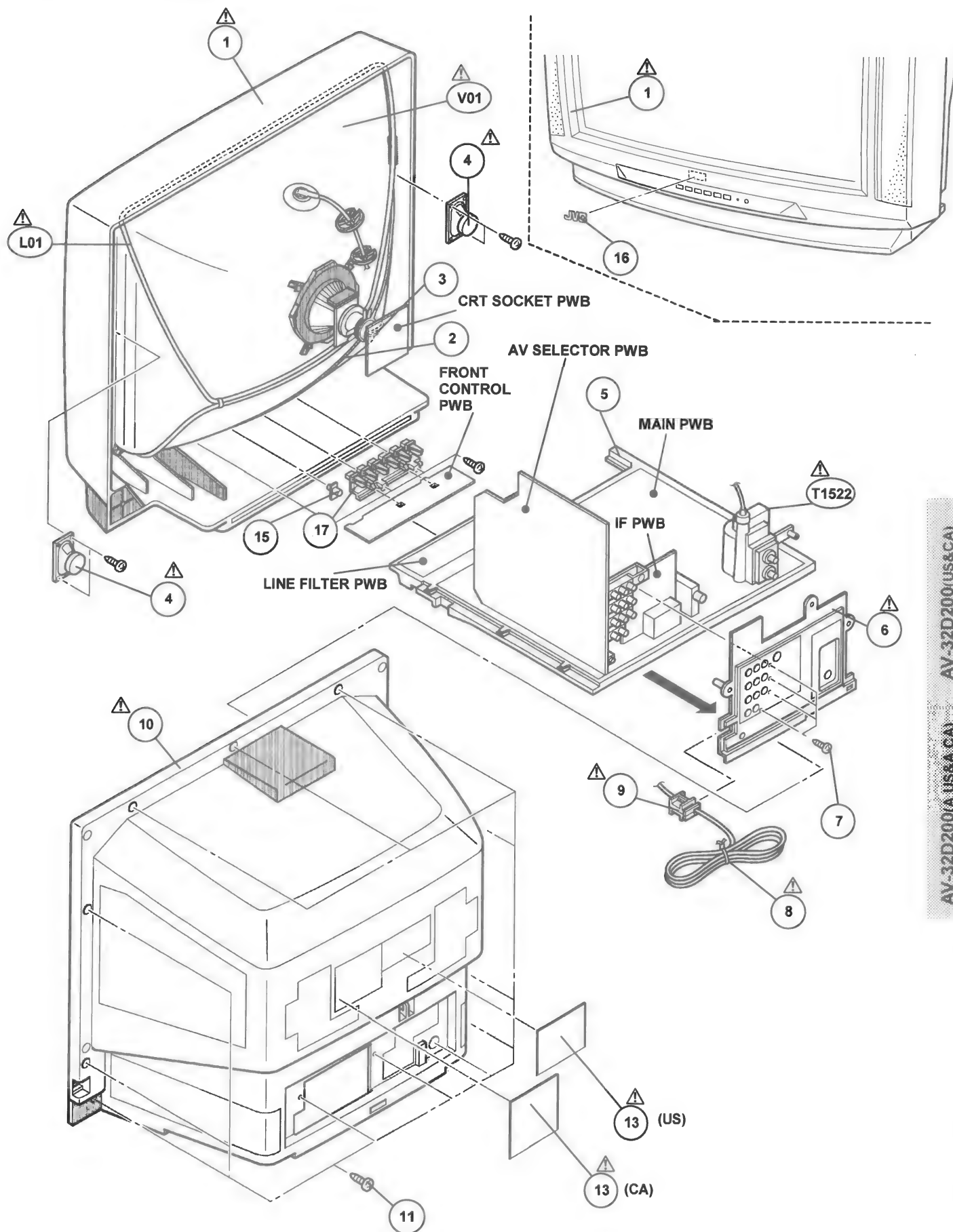
#### [ AV-32D200 (US&CA) ]

△ Ref.No.	Part No.	Part Name	Description	Local
△ V01	A80LJF30X08(W)	ITC TUBE(C)	Inc DY	*
△ L01	CELD066-002JA	DEGAUSSING COIL		*
△ T1522	QQH0051-001	FBT	Within MAIN PWB	*
△ 1	LC10307-001E-A	FRONT CABINET		*
2	CHGB0015-0E	BRAIDED WIRE		*
3	CHGB0016-0D	BRAIDED WIRE	(SUB)	*
△ 4	CEB5512D-04KJ2	SPEAKER	(×2)SP01,SP02	*
5	LC10363-001D-A	CHASSIS BASE		*
△ 6	LC10364-001C-A	TERMINAL BOARD		*
7	SBSB3010Z	TAPPING SCREW	(×4)	*
△ 8	QMPD200-200-JC	POWER CORD	Within LINE FILTER PWB	*
△ 9	LC20106-001B-A	POWER CORD CLAMP		*
△ 10	LC10308-001E-A	REAR COVER		*
11	QYSBSFG4016Z	TAPPING SCREW	(×12)	*
△ 13	CM23034-001-A	RATING LABEL	(US)	*
△ 13	CM22999-A01-A	RATING LABEL	(CA)	*
15	LC30191-002A-A	REMOCON LENS		*
16	CM48006-A03-H	JVC MARK		*
17	LC20217-001B-A	CONTROL KNOB		*

#### [ AV-32D200 (A US&A CA) ]

△ Ref.No.	Part No.	Part Name	Description	Local
△ V01	M80JUA061X06	PICTURE TUBE(C)	Inc DY	*
△ L01	CELD066-002JA	DEGAUSSING COIL		*
△ T1522	QQH0051-001	F B T	Within MAIN PWB	*
△ 1	LC10307-001E-A	FRONT CABINET		*
2	CHGB0015-0E	BRAIDED WIRE		*
3	CHGB0016-0D	BRAIDED WIRE	(SUB)	*
△ 4	CEB5512D-04KJ2	SPEAKER	(×2)SP01,SP02	*
5	LC10363-001D-A	CHASSIS BASE		*
△ 6	LC10364-001C-A	TERMINAL BOARD		*
7	SBSB3010Z	TAPPING SCREW	(×4)	*
△ 8	QMPD200-200-JC	POWER CORD	Within LINE FILTER PWB	*
△ 9	LC20106-001B-A	POWER CORD CLAMP		*
△ 10	LC10308-001E-A	REAR COVER		*
11	QYSBSFG4016Z	TAPPING SCREW	(×12)	*
△ 13	CM23034-001-A	RATING LABEL	(A US)	*
△ 13	CM22999-A01-A	RATING LABEL	(A CA)	*
15	LC30191-002A-A	REMOCON LENS		*
16	CM48006-A03-H	JVC MARK		*
17	LC20217-001B-A	CONTROL KNOB		*

# EXPLODED VIEW



AV-32D200(A US&A CA) AV-32D200(US&CA)

## PRINTED WIRING BOARD PARTS LIST

## II AV-32D200 (US&amp;CA)

## MAIN P.W. BOARD ASS'Y (SGR-1004A-M2)

Symbol No.	Part No.	Part Name	Description	Local
------------	----------	-----------	-------------	-------

## RESISTOR

R1003	NRSA02J-221X	MG R	220Ω 1/10W J	*
R1004	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1005	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1006	NRSA02J-820X	MG R	82Ω 1/10W J	*
R1201-02	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1203-04	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1205	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1209	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1210	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
R1212	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1213-14	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1215	NRSA02J-681X	MG R	680Ω 1/10W J	*
R1216	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
R1218-19	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1231	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1232	NRSA02J-221X	MG R	220Ω 1/10W J	*
R1233	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1234	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1235	NRSA02J-562X	MG R	5.6kΩ 1/10W J	*
R1236	NRSA02J-105X	MG R	1MΩ 1/10W J	*
R1237	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1238	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1241	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1242	NRSA02J-392X	MG R	3.9kΩ 1/10W J	*
R1243	NRSA02J-182X	MG R	1.8kΩ 1/10W J	*
R1245	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1246	NRSA02J-392X	MG R	3.9kΩ 1/10W J	*
R1247	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1248	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1251	NRVA02D-102X	MF R	1kΩ 1/10W D	*
R1252	NRVA02D-681X	MF R	680Ω 1/10W D	*
R1253	NRSA02J-183X	MG R	18kΩ 1/10W J	*
R1254	NRSA02J-105X	MG R	1MΩ 1/10W J	*
R1255	NRSA02J-124X	MG R	120kΩ 1/10W J	*
R1261	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1262	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1263	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1271	NRSA02J-561X	MG R	560Ω 1/10W J	*
R1272	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1273	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1274-75	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1276	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1277	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1278	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
R1279	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1280-83	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1301-02	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1401	NRVA02D-472X	MF R	4.7kΩ 1/10W D	*
R1421	NRSA02J-562X	MG R	5.6kΩ 1/10W J	*
R1423-24	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1426	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R1427	QRT029J-1R0	MF R	1.0Ω 2W J	*
R1429	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1430	NRSA02J-183X	MG R	18kΩ 1/10W J	*
R1431	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1432	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1433	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1434	QRG01GJ-221	OM R	220Ω 1W J	*
R1435	QRE121J-102Y	C R	1kΩ 1/2W J	*
R1501	QRK129J-151	C R	150Ω 1/2W J	*
R1502	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1503	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1504	NRSA02J-561X	MG R	560Ω 1/10W J	*
R1505	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1506	NRSA02J-101X	MG R	100Ω 1/10W J	*

Symbol No.	Part No.	Part Name	Description	Local
------------	----------	-----------	-------------	-------

## RESISTOR

R1507	NRSA02J-681X	MG R	680Ω 1/10W J	*
R1508-09	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1510	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1511	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1512	NRSA02J-563X	MG R	56kΩ 1/10W J	*
R1521	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1522	NRSA02J-271X	MG R	270Ω 1/10W J	*
R1523	QRE121J-103Y	C R	10kΩ 1/2W J	*
R1524-25	QRG029J-152	OM R	1.5kΩ 2W J	*
R1531	QRE121J-220Y	C R	22Ω 1/2W J	*
R1532	QRE121J-681Y	C R	680Ω 1/2W J	*
R1533	QRL039J-103	OM R	10kΩ 3W J	*
△ R1541	QRK129J-150	C R	15Ω 1/2W J	*
R1542	QRX01GJ-1R2	MF R	1.2Ω 1W J	*
△ R1544	QRZ9017-4R7	F R	4.7Ω 1/4W J	*
R1545	QRE121J-822Y	C R	8.2kΩ 1/2W J	*
R1547	QRE121J-154Y	C R	150kΩ 1/2W J	*
R1548	QRE121J-184Y	C R	180kΩ 1/2W J	*
△ R1556	QRA14CF-7321Y	MF R	7.32kΩ 1/4W F	*
△ R1557	QRA14CF-3301Y	MF R	3.3kΩ 1/4W F	*
R1558	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R1559	NRSA02J-123X	MG R	12kΩ 1/10W J	*
R1560	NRSA02J-273X	MG R	27kΩ 1/10W J	*
R1561	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1582	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1583	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1584	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1585	QRE121J-392Y	C R	3.9kΩ 1/2W J	*
R1586	QRE121J-682Y	C R	6.8kΩ 1/2W J	*
R1587	QRE121J-822Y	C R	8.2kΩ 1/2W J	*
R1588	QRL039J-270	OM R	27Ω 3W J	*
R1601	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1602	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1603	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1604	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1605	QRT029J-R15	MF R	0.15Ω 2W J	*
R1606-07	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1611	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R1612	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1615-16	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1617	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1701	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1704	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1705	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1706	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1708	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1710	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1714	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1716	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1717	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1718	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1719	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1720	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1721	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1724	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1725	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1726-27	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1728-29	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1730-31	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1732	NRSA02J-224X	MG R	220kΩ 1/10W J	*
R1733-34	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1736	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1739	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1741	NRSA02J-223X	MG R	22kΩ 1/10W J	*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>RESISTOR</b>				
R1742	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R1743	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1744	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1745	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1746	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1747	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1748	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1749	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1753-54	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1756	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1757-58	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1759	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1772	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1773	NRSA02J-121X	MG R	120Ω 1/10W J	*
R1775	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1777	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1791-95	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1801-03	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1804	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1805-07	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1821	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1822	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R1823	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R1824	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R1825	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1826	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1831-34	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1835-36	NRSA02J-473X	MG R	47kΩ 1/10W J	*
△ R1901	QRF074K-R47	UNF R	0.47 Ω 7W K	*
R1902	QRE121J-333Y	C R	33kΩ 1/2W J	*
R1903	NRSA02J-681X	MG R	680Ω 1/10W J	*
R1904-05	QRT029J-R22	MF R	0.22Ω 2W J	*
R1909	QRE121J-332Y	C R	3.3kΩ 1/2W J	*
R1912-13	QRE121J-333Y	C R	33kΩ 1/2W J	*
R1914	QRE121J-2R2Y	C R	2.2Ω 1/2W J	*
R1916	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1917	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1918	NRSA02J-182X	MG R	1.8kΩ 1/10W J	*
R1919	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1920	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1924	QRG01GJ-221	OM R	220Ω 1W J	*
R1925	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1926	QRT029J-R82	MF R	0.82Ω 2W J	*
R1928	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1931	NRSA02J-123X	MG R	12kΩ 1/10W J	*
R1933	NRSA02J-123X	MG R	12kΩ 1/10W J	*
R1934	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1936	QRE121J-222Y	C R	2.2kΩ 1/2W J	*
R1937	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1940	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1941	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1942	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1943	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1944	NRSA02J-393X	MG R	39kΩ 1/10W J	*
R1945-46	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1947	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1948	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1949	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1951-52	QRT029J-1R2	MF R	1.2Ω 2W J	*
R1954	QRE121J-272Y	C R	2.7kΩ 1/2W J	*
R1955	QRE121J-473Y	C R	47kΩ 1/2W J	*
R1956	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1958-59	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1961	QRJ146J-3R3X	C R	3.3Ω 1/4W J	*
R1962	QRL029J-472	OM R	4.7kΩ 2W J	*
R1963	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1966	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1967	QRE121J-683Y	C R	68kΩ 1/2W J	*
R1971	QRL029J-330	OM R	33Ω 2W J	*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>CAPACITOR</b>				
C1001	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1003	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1004	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1005	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1006	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1007	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1009	NDC21HJ-151X	C CAP.	150pF 50V J	*
C1011	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1201	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1205	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1206	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1207	QETN1CM-108Z	E CAP.	1000μF 16V M	*
C1208	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1230	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1231	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1233	NCB21HK-682X	C CAP.	6800pF 50V K	*
C1234	NCB21EK-683X	C CAP.	0.068μF 25V K	*
C1235	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1241	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1242	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1243	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1251	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1252	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1253	QETN1HM-225Z	E CAP.	2.2μF 50V M	*
C1254	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1255	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1256	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1271	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1281	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1283-87	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1288-89	QENC1CM-106Z	BP E CAP.	10μF 16V M	*
C1301	NDC21HJ-9R0X	C CAP.	9.0pF 50V J	*
C1302	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1303	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
C1304	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1305	NDC21HJ-180X	C CAP.	18pF 50V J	*
C1306	NDC21HJ-101X	C CAP.	100pF 50V J	*
C1307	QETN1AM-108Z	E CAP.	1000μF 10V M	*
C1308	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1309	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1402	QFV71HJ-334Z	MF CAP.	0.33μF 50V J	*
C1403	QFV71HJ-394Z	MF CAP.	0.39μF 50V J	*
C1422	QFLC1HJ-103Z	M CAP.	0.01μF 50V J	*
C1424	QETN1VM-107Z	E CAP.	100μF 35V M	*
C1425	QETN1VM-477Z	E CAP.	470μF 35V M	*
C1427	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1428	QETM1EM-228	E CAP.	2200μF 25V M	*
C1431	QFLC1HJ-563Z	M CAP.	0.056μF 50V J	*
C1432	QETN1HM-476Z	E CAP.	47μF 50V M	*
C1433	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1434	NDC21HJ-100X	C CAP.	10pF 50V J	*
C1435	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1436	QFN32AK-224	M CAP.	0.22μF 100V K	*
C1501	QETN1CM-337Z	E CAP.	330μF 16V M	*
C1502	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1503	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1504	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1505	NCB21HK-333X	C CAP.	0.033μF 50V K	*
C1506	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1507	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1508	NDC21HG-201X	CHIP C CAP.	200pF 50V G	*
C1510	QETN1HM-225Z	E CAP.	2.2μF 50V M	*
C1521	QCB32HK-151Z	C CAP.	150pF 500V K	*
C1522	QCB32HK-331Z	C CAP.	330pF 500V K	*
C1523	QETN2CM-105Z	E CAP.	1μF 160V M	*
△ C1531	QFZ0117-3501	MPP CAP.	3500pF1.4kVH±2.5%	*
△ C1532	QFZ0117-1302	MPP CAP.	0.013μF1.4kVH±2.5%	*
△ C1533	QFP32GJ-223	PP CAP.	0.022μF 400V J	*
C1534	QEHR2EM-225Z	E CAP.	2.2μF 250V M	*

AV-32D200(US&amp;CA)

△ Symbol No.	Part No.	Part Name	Description	Local
<b>CAPACITOR</b>				
△ C1535	QFZ0119-754	MPP CAP.	0.75μF 200V ±3%	*
C1536	QCB32HK-561Z	C CAP.	560pF 500V K	*
C1538	QEZO420-107	E CAP.	100μF 160V M	*
C1541	QETN2EM-106Z	E CAP.	10μF 250V M	*
C1542	QETN1VM-108	E CAP.	1000μF 35V M	*
C1544	QETN1VM-107Z	E CAP.	100μF 35V M	*
C1545	QFLC2AJ-103Z	M CAP.	0.01μF 100V J	*
C1546	QFV71HJ-684Z	MF CAP.	0.68μF 50V J	*
C1551	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1578-79	QEM61HK-475Z	E CAP.	4.7μF 50V K	*
C1602	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1604	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1605	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1606	QETN1EM-108Z	E CAP.	1000μF 25V M	*
C1607	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1608-09	QETN1EM-108Z	E CAP.	1000μF 25V M	*
C1613	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1615-17	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1701	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1703	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1704	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1705	NDC21HJ-181X	C CAP.	180pF 50V J	*
C1706	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1708	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1709	NDC21HJ-221X	C CAP.	220pF 50V J	*
C1710-11	NDC21HJ-390X	C CAP.	39pF 50V J	*
C1712	NDC21HJ-270X	C CAP.	27pF 50V J	*
C1713	NDC21HJ-150X	C CAP.	15pF 50V J	*
C1714	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1715	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1716	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1717-18	NDC21HJ-330X	C CAP.	33pF 50V J	*
C1719	NDC21HJ-471X	C CAP.	470pF 50V J	*
C1720-21	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1736	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1741	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1743	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1744	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
C1746	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1771	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1772	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1773	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1774	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1784	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1801-03	QETN1HM-105Z	E CAP.	1μF 50V M	*
△ C1906	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1907	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1908	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1910	QEZO169-477	E CAP.	470μF 200V M	*
C1911	QETN1VM-477Z	E CAP.	470μF 35V M	*
C1912	QFN31HJ-102Z	M CAP.	1000pF 50V J	*
C1913	QCZ0131-102	C CAP.	1000pF 2000V K	*
C1914	QCZ0325-391	C CAP.	390pF 2000V K	*
C1918	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1919	NCB21HK-272X	C CAP.	2700pF 50V K	*
C1920	QFLC1HJ-823Z	M CAP.	0.082μF 50V J	*
C1921	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1923	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1924	QEZO420-107	E CAP.	100μF 160V M	*
C1925	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1926	QETN1VM-108	E CAP.	1000μF 35V M	*
C1927	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1928	QETN1EM-108Z	E CAP.	1000μF 25V M	*
C1931-32	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1933	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1934	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1935	QETN1HM-107Z	E CAP.	100μF 50V M	*
C1937	QETN2CM-106Z	E CAP.	10μF 160V M	*
C1938	NDC21HJ-471X	C CAP.	470pF 50V J	*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>CAPACITOR</b>				
C1951	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1952	QETN1HM-476Z	E CAP.	47μF 50V M	*
C1954	QETN1HM-226Z	E CAP.	22μF 50V M	*
C1971	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1972	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1973	QETN1CM-108Z	E CAP.	1000μF 16V M	*
△ C1990	QCZ9074-103	C CAP.	0.01μFAC125V M	*
△ C1991	QCZ9074-103	C CAP.	0.01μFAC125V M	*

**TRANSFORMER**

T1521	CE42034-002	H.DRIVE TRANSF.	*
△ T1522	QOH0051-001	F B T	*
△ T1901	CETS124-001J8	SW TRANSF.	*

**COIL**

L1002	QQL29BJ-101Z	PEAKING COIL	100μH	*
L1201	QQL29BJ-220Z	PEAKING COIL	22μH	*
△ L1531	CE41663-00B	LINEARITY COIL		*
L1532	QQLZ016-821	CHOKE COIL		*
△ L1591	QQLZ018-360	HEATER CHOKE		*
L1701	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L1702	QQL244J-100Z	COIL	10μH	*
L1771	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L1921-22	QQL42AK-820Z	COIL	82μH	*

**DIODE**

D1001	MTZJ33A-T2	ZENER DIODE	*
D1241-42	1SS133-T2	SI.DIODE	*
D1244-45	1SS133-T2	SI.DIODE	*
D1421	1N4003-T2	SI.DIODE	*
D1422	MTZJ75-T2	ZENER DIODE	*
D1501	1SS133-T2	SI.DIODE	*
D1502-03	MTZJ6.2B-T2	ZENER DIODE	*
D1504	MTZJ5.1B-T2	ZENER DIODE	*
D1531	RH3G-F1	SI.DIODE	*
D1532	RU3AM-LFC4	SI.DIODE	*
D1533	RGPI0J-5025-T3	SI.DIODE	*
D1541	RH15-T3	SI.DIODE	*
D1542	RGPI0J-5025-T3	SI.DIODE	*
D1544	1SS81-T2	SI.DIODE	*
D1546	1SR124-400A-T2	SI.DIODE	*
D1547	1SS81-T2	SI.DIODE	*
D1549	MTZJ5.1B-T2	ZENER DIODE	*
△ D1551	MA4068N/Z1/-T2	ZENER DIODE	*
D1560-61	1SS133-T2	SI.DIODE	*
D1601-02	1SS133-T2	SI.DIODE	*
D1608-10	1SS133-T2	SI.DIODE	*
D1701-03	1SS133-T2	SI.DIODE	*
D1741-42	1SS133-T2	SI.DIODE	*
D1771-72	1SS133-T2	SI.DIODE	*
D1831-32	1SS133-T2	SI.DIODE	*
△ D1901	D3SBA60-S1	BRIDGE DIODE	*
D1902	RGPI0J-5025-T3	SI.DIODE	*
D1903-04	1SS133-T2	SI.DIODE	*
D1909	MTZJ15A-T2	ZENER DIODE	*
D1910	RGPI0J-5025-T3	SI.DIODE	*
D1911	1SS133-T2	SI.DIODE	*
D1912	MTZJ15A-T2	ZENER DIODE	*
D1913-14	RGPI0J-5025-T3	SI.DIODE	*
D1916	RGPI0J-5025-T3	SI.DIODE	*
D1918	MTZJ15A-T2	ZENER DIODE	*
D1919-20	1SS133-T2	SI.DIODE	*
D1921	RU30A-F1	SI.DIODE	*

Symbol No.	Part No.	Part Name	Description	Local
<b>DIODE</b>				
D1922-23	RU3YX-LFC4	SI. DIODE		*
D1925	RGP10J-5025-T3	SI. DIODE		*
D1926-28	1SS133-T2	SI. DIODE		*
D1931	1SS133-T2	SI. DIODE		*
D1933	1SS133-T2	SI. DIODE		*
D1942	MTZJ6.8A-T2	ZENER DIODE		*
D1951	MTZJ7.5S-T2	ZENER DIODE		*

<b>TRANSISTOR</b>				
Q1001	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1201	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1203	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1204-05	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1231	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1241-42	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1261	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1271-74	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1521	2SC4212/Z1/	SI. TRANSISTOR		*
△ Q1531	2SD2539-LB	SI. TRANSISTOR	H. OUT	*
Q1541	2SA1037AK/QR/-X	SI. TRANSISTOR		*
△ Q1542	2SC2785/JH/-T	SI. TRANSISTOR		*
Q1551-52	2SA1309A/QR/-T	SI. TRANSISTOR		*
△ Q1553	2SD1408/OY/-LB	SI. TRANSISTOR		*
Q1602	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1603	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1604	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1741-42	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1743-44	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1821	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1822-23	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1831	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1832	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1911	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1912	2SD2088-T	SI. TRANSISTOR		*
Q1921	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1922	2SD1383K/AB/-X	SI. TRANSISTOR		*
Q1923	2SA1020/Y/-T	SI. TRANSISTOR		*
Q1924	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1925	2SA949/Y/Z1-T	SI. TRANSISTOR		*
Q1926	2SC2240/GL/-T	SI. TRANSISTOR		*
Q1927-28	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1942	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1943	2SC2240/GL/-T	SI. TRANSISTOR		*
Q1944	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1951	2SA949/Y/Z1-T	SI. TRANSISTOR		*

<b>IC</b>				
IC1001	BA17805T	I. C. (MONO-ANA)		*
IC1201	JCC1007A	I. C. (MONO-ANA)		*
IC1281	M52055FP-X	I. C. (MONO-ANA)		*
△ IC1421	LA7841	I. C. (MONO-ANA)		*
IC1423	AN78L09-T	I. C. (MONO-ANA)		*
△ IC1601	LA4485	I. C. (MONO-ANA)		*
IC1701	MN1874878JR	I. C.		*
IC1702	AT24C02-32D500	I. C.	(SERVICE)	*
IC1703	MN1381/Q/-T	I. C. (MONO-ANA)		*
IC1771	AN77L05-T	I. C. (MONO-ANA)		*
△ IC1901	STR-F6626	I. C. (HYBRID)		*
△ IC1941	SE135N	I. C. (HYBRID)		*
IC1971	BA17809T	I. C. (MONO-ANA)		*

<b>OTHERS</b>				
CF1001	QAX0349-001	CERAMIC TRAP		*
CF1501	CSB503F39	CER. RESONATOR		*
CF1701	FCR12.0M2S	CER. RESONATOR		*
K1421	CE42050-001Z	CORE		*
K1901-03	CE41433-001Z	BEADS CORE		*
K1905-06	CE41433-001Z	BEADS CORE		*
K1921-24	CE41433-001Z	BEADS CORE		*
△ PC1901	TLP621(B)	I. C. (PH. COUPLER)		*
△ PC1902	TLP621(B)	I. C. (PH. COUPLER)		*
△ RY1901	CESK028-001	RELAY		*
△ RY1921	CESK028-001	RELAY		*
S1421	QSL4A13-C02	LEVER SWITCH	V SENTER	*
△ TH1901	CEKP007-002	P. THERMISTOR		*
△ TU1001	QAU0133-001	TUNER		*
W1295	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1297	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1300	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1667-68	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1677	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1691-96	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1718-21	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1763-65	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1770	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1820	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1827-28	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1834	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1856	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1878-79	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1885	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1892	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1900	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1902	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
X1301	QAX0310-001Z	CRYSTAL		*
Y1602	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1604	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1709	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1711	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1721-22	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*

AV-32D200(us&amp;CA)

**CRT SOCKET P.W. BOARD ASS'Y  
(SGR-3001A-M2)**

Refer to PARTS LIST in page 42 for this P.W. board.

**FRONT CONTROL P.W. BOARD ASS'Y  
(SGR-4001A-M2)**

Refer to PARTS LIST in page 42 for this P.W. board.

**AV-SELECTOR P.W. BOARD ASS'Y  
(SGR-8001A-M2)**

Refer to PARTS LIST in page 43 for this P.W. board.

**LINE FILTER P.W. BOARD ASS'Y (SGR-9002A-M2)**

△ Symbol No.	Part No.	Part Name	Description	Local
--------------	----------	-----------	-------------	-------

**RESISTOR**

△ R9998	QRZ9041-275	C R	2.7MΩ 1/2W K	*
R9999	QRE121J-121Y	C R	120Ω 1/2W J	*

**CAPACITOR**

△ C9901	QFZ9067-104	MPP CAP.	0.1μFAC275V M	*
△ C9902	QFZ9067-473	MPP CAP.	0.047μFAC275V M	*
△ C9903	QFZ9067-104	MPP CAP.	0.1μFAC275V M	*
△ C9904	QCZ9052-102	C CAP.	1000pFAC125V M	*

**OTHERS**

△ CN90PW	QMPD200-200-JC	POWER CORD		*
△ F9901	QMF0007-5R0J1	FUSE	5.0A	*
FC9901	CEMG002-001Z	FUSE CLIP		*
△ LF9901	CELF001-001J1	LINE FILTER		*
△ LF9902	CE42335-001J1	LINE FILTER		*
△ VA9901	ERZV10V361CS	VARISTOR		*

**IF P.W. BOARD ASS'Y  
(SGR0F001A-M2)**

Refer to PARTS LIST in page 45 for this P.W. board.



## III AV-32D200 (A US&amp;A CA)

## MAIN P.W. BOARD ASS'Y (SGR-1007A-M2)

Symbol No.	Part No.	Part Name	Description	Local
------------	----------	-----------	-------------	-------

## RESISTOR

R1003	NRSA02J-221X	MG R	220Ω 1/10W J	*
R1004	NRSA02J-0ROX	MG R	0.0Ω 1/10W J	*
R1005	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1006	NRSA02J-820X	MG R	82Ω 1/10W J	*
R1201	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1202	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1203	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1204	NRSA02J-563X	MG R	56kΩ 1/10W J	*
R1205	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1209	NRSA02J-0ROX	MG R	0.0Ω 1/10W J	*
R1210	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
R1212	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1213-14	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1215	NRSA02J-681X	MG R	680Ω 1/10W J	*
R1216	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
R1218-19	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1231	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1232	NRSA02J-221X	MG R	220Ω 1/10W J	*
R1233	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1234	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1235	NRSA02J-562X	MG R	5.6kΩ 1/10W J	*
R1236	NRSA02J-105X	MG R	1MΩ 1/10W J	*
R1237	NRSA02J-0ROX	MG R	0.0Ω 1/10W J	*
R1238	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1241	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1242	NRSA02J-392X	MG R	3.9kΩ 1/10W J	*
R1243	NRSA02J-182X	MG R	1.8kΩ 1/10W J	*
R1245	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1246	NRSA02J-392X	MG R	3.9kΩ 1/10W J	*
R1247	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1248	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1251	NRVA02D-102X	MF R	1kΩ 1/10W D	*
R1252	NRVA02D-681X	MF R	680Ω 1/10W D	*
R1253	NRSA02J-183X	MG R	18kΩ 1/10W J	*
R1254	NRSA02J-105X	MG R	1MΩ 1/10W J	*
R1255	NRSA02J-124X	MG R	120kΩ 1/10W J	*
R1261	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1262	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1263	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1271	NRSA02J-561X	MG R	560Ω 1/10W J	*
R1272	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1273	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1274-75	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1276	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1277	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1278	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
R1279	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1280-83	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1301-02	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1401	NRVA02D-472X	MF R	4.7kΩ 1/10W D	*
R1421	NRSA02J-562X	MG R	5.6kΩ 1/10W J	*
R1423-24	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1426	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R1427	QRT029J-1R0	MF R	1.0Ω 2W J	*
R1429	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1430	NRSA02J-183X	MG R	18kΩ 1/10W J	*
R1431	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1432	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1433	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1434	QRT016J-221	OM R	220Ω 1W J	*
R1435	QRE121J-102Y	C R	1kΩ 1/2W J	*
R1501	QRK129J-151	C R	150Ω 1/2W J	*
R1502	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1503	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1504	NRSA02J-561X	MG R	560Ω 1/10W J	*
R1505	NRSA02J-473X	MG R	47kΩ 1/10W J	*

Symbol No.	Part No.	Part Name	Description	Local
------------	----------	-----------	-------------	-------

## RESISTOR

R1506	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1507	NRSA02J-681X	MG R	680Ω 1/10W J	*
R1508-09	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1510	NRSA02J-0ROX	MG R	0.0Ω 1/10W J	*
R1511	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1512	NRSA02J-563X	MG R	56kΩ 1/10W J	*
R1521	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1522	NRSA02J-271X	MG R	270Ω 1/10W J	*
R1523	QRE121J-103Y	C R	10kΩ 1/2W J	*
R1524-25	QRG029J-152	OM R	1.5kΩ 2W J	*
R1531	QRE121J-220Y	C R	22Ω 1/2W J	*
R1532	QRE121J-681Y	C R	680Ω 1/2W J	*
R1533	QRL039J-103	OM R	10kΩ 3W J	*
△ R1541	QRK129J-150	C R	15Ω 1/2W J	*
R1542	QRX016J-1R2	MF R	1.2Ω 1W J	*
△ R1544	QRZ9017-4R7	F R	4.7Ω 1/4W J	*
R1545	QRE121J-822Y	C R	8.2kΩ 1/2W J	*
R1547	QRE121J-154Y	C R	150kΩ 1/2W J	*
R1548	QRE121J-184Y	C R	180kΩ 1/2W J	*
△ R1556	QRA14CF-7321Y	MF R	7.32kΩ 1/4W F	*
△ R1557	QRA14CF-3301Y	MF R	3.3kΩ 1/4W F	*
R1558	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R1559	NRSA02J-123X	MG R	12kΩ 1/10W J	*
R1560	NRSA02J-273X	MG R	27kΩ 1/10W J	*
R1561	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1582	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1583	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1584	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1585	QRE121J-392Y	C R	3.9kΩ 1/2W J	*
R1586	QRE121J-682Y	C R	6.8kΩ 1/2W J	*
R1587	QRE121J-822Y	C R	8.2kΩ 1/2W J	*
R1588	QRL039J-270	OM R	27Ω 3W J	*
R1601	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1602	NRSA02J-0ROX	MG R	0.0Ω 1/10W J	*
R1603	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1604	NRSA02J-0ROX	MG R	0.0Ω 1/10W J	*
R1605	QRT029J-R15	MF R	0.15Ω 2W J	*
R1606-07	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1611	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R1612	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1615-16	NRSA02J-821X	MG R	820Ω 1/10W J	*
R1617	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1701	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1704	NRSA02J-0ROX	MG R	0.0Ω 1/10W J	*
R1705	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1706	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1708	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1710	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1714-16	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1717	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1718	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1719	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1720	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1721	NRSA02J-331X	MG R	330Ω 1/10W J	*
R1724	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1725	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1726-27	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1728-29	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1730-31	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1732	NRSA02J-224X	MG R	220kΩ 1/10W J	*
R1733-34	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1736	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1739	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1741	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1742	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R1743	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*

AV-32D200(A US&amp;A CA)

△ Symbol No.	Part No.	Part Name	Description	Local
<b>RESISTOR</b>				
R1744	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1745	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1746	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1747	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1748	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1749	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1750	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1753-54	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1756	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1757-58	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1759	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1772	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1773	NRSA02J-121X	MG R	120Ω 1/10W J	*
R1775	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1777	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1791-95	NRSA02J-471X	MG R	470Ω 1/10W J	*
R1801-04	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
R1805-07	NRSA02J-101X	MG R	100Ω 1/10W J	*
R1821	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1822	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R1823	NRSA02J-153X	MG R	15kΩ 1/10W J	*
R1824	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R1825	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1826	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R1831	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1832	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1833-34	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1835-36	NRSA02J-473X	MG R	47kΩ 1/10W J	*
△ R1901	QRF074K-R47	UNF R	0.47 Ω 7W K	*
R1902	QRE121J-333Y	C R	33kΩ 1/2W J	*
R1903	NRSA02J-681X	MG R	680Ω 1/10W J	*
R1904-05	QRT029J-R22	MF R	0.22Ω 2W J	*
R1909	QRE121J-332Y	C R	3.3kΩ 1/2W J	*
R1912-13	QRE121J-333Y	C R	33kΩ 1/2W J	*
R1914	QRE121J-2R2Y	C R	2.2Ω 1/2W J	*
R1916	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1917	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1918	NRSA02J-182X	MG R	1.8kΩ 1/10W J	*
R1919	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
R1920	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1924	QRG01GJ-221	OM R	220Ω 1W J	*
R1925	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1926	QRT029J-R82	MF R	0.82Ω 2W J	*
R1928	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
R1931	NRSA02J-123X	MG R	12kΩ 1/10W J	*
R1933	NRSA02J-123X	MG R	12kΩ 1/10W J	*
R1934	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1936	QRE121J-222Y	C R	2.2kΩ 1/2W J	*
R1937	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1940	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1941	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1942	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1943	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1944	NRSA02J-393X	MG R	39kΩ 1/10W J	*
R1945-46	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R1947	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R1948	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R1949	NRSA02J-104X	MG R	100kΩ 1/10W J	*
R1951-52	QRT029J-1R2	MF R	1.2Ω 2W J	*
R1954	QRE121J-272Y	C R	2.7kΩ 1/2W J	*
R1955	QRE121J-473Y	C R	47kΩ 1/2W J	*
R1956	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1958-59	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R1961	QRJ146J-3R3X	C R	3.3Ω 1/4W J	*
R1962	QRL029J-472	OM R	4.7kΩ 2W J	*
R1963	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R1966	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R1967	QRE121J-683Y	C R	68kΩ 1/2W J	*
R1971	QRL029J-330	OM R	33Ω 2W J	*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>CAPACITOR</b>				
C1001	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1003	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1004	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1005	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1006	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1007	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1011	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1201	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1205	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1206	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1207	QETN1CM-108Z	E CAP.	1000μF 16V M	*
C1208	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1225	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1231	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1233	NCB21HK-682X	C CAP.	6800pF 50V K	*
C1234	NCB21EK-683X	C CAP.	0.068μF 25V K	*
C1235	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1241	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1242	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1243	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1251	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1252	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1253	QETN1HM-225Z	E CAP.	2.2μF 50V M	*
C1254	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1255	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1256	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1271	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1281	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1283-87	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1288-89	QENC1CM-106Z	BP E CAP.	10μF 16V M	*
C1301	NDC21HJ-9R0X	C CAP.	9.0pF 50V J	*
C1302	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1303	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
C1304	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1305	NDC21HJ-180X	C CAP.	18pF 50V J	*
C1306	NDC21HJ-101X	C CAP.	100pF 50V J	*
C1307	QETN1AM-108Z	E CAP.	1000μF 10V M	*
C1308	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1309	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1402	QFV71HJ-334Z	MF CAP.	0.33μF 50V J	*
C1403	QFV71HJ-394Z	MF CAP.	0.39μF 50V J	*
C1422	QFLC1HJ-103Z	M CAP.	0.01μF 50V J	*
C1424	QETN1VM-107Z	E CAP.	100μF 35V M	*
C1425	QETN1VM-477Z	E CAP.	470μF 35V M	*
C1427	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1428	QETN1EM-228	E CAP.	2200μF 25V M	*
C1431	QFLC1HJ-563Z	M CAP.	0.056μF 50V J	*
C1432	QETN1HM-476Z	E CAP.	47μF 50V M	*
C1433	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1434	NDC21HJ-100X	C CAP.	10pF 50V J	*
C1435	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1436	QFN32AK-224	M CAP.	0.22μF 100V K	*
C1501	QETN1CM-337Z	E CAP.	330μF 16V M	*
C1502	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1503	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1504	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1505	NCB21HK-333X	C CAP.	0.033μF 50V K	*
C1506	NCB21HK-223X	C CAP.	0.022μF 50V K	*
C1507	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1508	NDC21HG-201X	CHIP C CAP.	200pF 50V G	*
C1510	QETN1HM-225Z	E CAP.	2.2μF 50V M	*
C1521	QCB32HK-151Z	C CAP.	150pF 500V K	*
C1522	QCB32HK-331Z	C CAP.	330pF 500V K	*
C1523	QETN2CM-105Z	E CAP.	1μF 160V M	*
△ C1531	QFZ0117-3501	MPP CAP.	3500pF1.4kVH±2.5%	*
△ C1532	QFZ0117-1302	MPP CAP.	0.013μF1.4kVH±2.5%	*
△ C1533	QFP32GJ-223	PP CAP.	0.022μF 400V J	*
C1534	QEH2EM-225Z	E CAP.	2.2μF 250V M	*
△ C1535	QFZ0119-564	MPP CAP.	0.56μF 200V ±3%	*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>CAPACITOR</b>				
C1536	QCB32HK-561Z	C CAP.	560pF 500V K	*
C1538	QE20420-107	E CAP.	100μF 160V M	*
C1541	QETN2EM-106Z	E CAP.	10μF 250V M	*
C1542	QETN1VM-108	E CAP.	1000μF 35V M	*
C1544	QETN1VM-107Z	E CAP.	100μF 35V M	*
C1545	QFLC2AJ-103Z	M CAP.	0.01μF 100V J	*
C1546	QFV71HJ-684Z	MF CAP.	0.68μF 50V J	*
C1551	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1578-79	QEM61HK-475Z	E CAP.	4.7μF 50V K	*
C1602	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1604	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1605	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1606	QETN1EM-108Z	E CAP.	1000μF 25V M	*
C1607	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1608-09	QETN1EM-108Z	E CAP.	1000μF 25V M	*
C1613	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1615-17	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1701	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1703	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1704	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1705	NDC21HJ-181X	C CAP.	180pF 50V J	*
C1706	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1708	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1709	NDC21HJ-221X	C CAP.	220pF 50V J	*
C1710-11	NDC21HJ-390X	C CAP.	39pF 50V J	*
C1712	NDC21HJ-270X	C CAP.	27pF 50V J	*
C1714	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1715	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1716	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1717-18	NDC21HJ-330X	C CAP.	33pF 50V J	*
C1719	NDC21HJ-471X	C CAP.	470pF 50V J	*
C1720-21	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1736	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1741	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1743	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1744	NRS402J-0R0X	MG R	0.00 1/10W J	*
C1746	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1771	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1772	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1773	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1774	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1784	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1801-03	QETN1HM-105Z	E CAP.	1μF 50V M	*
△ C1906	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1907	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1908	QCZ9078-102	C CAP.	1000pFAC250V M	*
△ C1910	QE20169-477	E CAP.	470μF 200V M	*
C1911	QETN1VM-477Z	E CAP.	470μF 35V M	*
C1912	QFN31HJ-102Z	M CAP.	1000pF 50V J	*
C1913	QCZ0131-102	C CAP.	1000pF 2000V K	*
C1914	QCZ0325-391	C CAP.	390pF 2000V K	*
C1918	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1919	NCB21HK-272X	C CAP.	2700pF 50V K	*
C1920	QFLC1HJ-823Z	M CAP.	0.082μF 50V J	*
C1921	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1923	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1924	QE20420-107	E CAP.	100μF 160V M	*
C1925	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1926	QETN1VM-108	E CAP.	1000μF 35V M	*
C1927	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1928	QETN1EM-108Z	E CAP.	1000μF 25V M	*
C1931-32	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1933	QCZ0132-152Z	C CAP.	1500pF 500V K	*
C1934	NCB21HK-102X	C CAP.	1000pF 50V K	*
C1935	QETN1HM-107Z	E CAP.	100μF 50V M	*
C1937	QETN2CM-106Z	E CAP.	10μF 160V M	*
C1938	NDC21HJ-471X	C CAP.	470pF 50V J	*
C1951	QETN1CM-107Z	E CAP.	100μF 16V M	*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>CAPACITOR</b>				
C1952	QETN1HM-476Z	E CAP.	47μF 50V M	*
C1954	QETN1HM-226Z	E CAP.	22μF 50V M	*
C1971	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	*
C1972	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C1973	QETN1CM-108Z	E CAP.	1000μF 16V M	*
△ C1990	QCZ9074-103	C CAP.	0.01μFAC125V M	*
△ C1991	QCZ9074-103	C CAP.	0.01μFAC125V M	*
<b>TRANSFORMER</b>				
T1521	CE42034-002	H.DRIVE TRANSF.		*
△ T1522	QQH0051-001	F B T		*
△ T1901	CETS124-001J8	SW TRANSF.		*
<b>COIL</b>				
L1002	QQL29BJ-101Z	PEAKING COIL	100μH	*
L1201	QQL29BJ-220Z	PEAKING COIL	22μH	*
△ L1531	CE41663-008	LINEARITY COIL		*
L1532	QQL2016-821	CHOKE COIL		*
△ L1591	QQL2018-280	HEATER CHOKE		*
L1701	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L1702	QQL244J-100Z	COIL	10μH	*
L1771	QQL29BJ-4R7Z	PEAKING COIL	4.7μH	*
L1921-22	QQL42AK-820Z	COIL	82μH	*
<b>DIODE</b>				
D1001	MTZJ33A-T2	ZENER DIODE		*
D1241-42	1SS133-T2	SI.DIODE		*
D1244-45	1SS133-T2	SI.DIODE		*
D1421	1N4003-T2	SI.DIODE		*
D1422	MTZJ75-T2	ZENER DIODE		*
D1501	1SS133-T2	SI.DIODE		*
D1502-03	MTZJ6.2B-T2	ZENER DIODE		*
D1504	MTZJ5.1B-T2	ZENER DIODE		*
D1531	RH3G-F1	SI.DIODE		*
D1532	RU3AM-LFC4	SI.DIODE		*
D1533	RGP10J-5025-T3	SI.DIODE		*
D1541	RH1S-T3	SI.DIODE		*
D1542	RGP10J-5025-T3	SI.DIODE		*
D1544	1SS81-T2	SI.DIODE		*
D1546	1SR124-400A-T2	SI.DIODE		*
D1547	1SS81-T2	SI.DIODE		*
D1549	MTZJ5.1B-T2	ZENER DIODE		*
△ D1551	MA4068N/Z1/-T2	ZENER DIODE		*
D1560-61	1SS133-T2	SI.DIODE		*
D1601-02	1SS133-T2	SI.DIODE		*
D1608-10	1SS133-T2	SI.DIODE		*
D1701-03	1SS133-T2	SI.DIODE		*
D1741-42	1SS133-T2	SI.DIODE		*
D1771-72	1SS133-T2	SI.DIODE		*
D1831-32	1SS133-T2	SI.DIODE		*
△ D1901	D3SBA60-S1	BRIDGE DIODE		*
D1902	RGP10J-5025-T3	SI.DIODE		*
D1903-04	1SS133-T2	SI.DIODE		*
D1909	MTZJ15A-T2	ZENER DIODE		*
D1910	RGP10J-5025-T3	SI.DIODE		*
D1911	1SS133-T2	SI.DIODE		*
D1912	MTZJ15A-T2	ZENER DIODE		*
D1913-14	RGP10J-5025-T3	SI.DIODE		*
D1916	RGP10J-5025-T3	SI.DIODE		*
D1918	MTZJ15A-T2	ZENER DIODE		*
D1919-20	1SS133-T2	SI.DIODE		*
D1921	RU30A-F1	SI.DIODE		*
D1922-23	RU3YX-LFC4	SI.DIODE		*
D1925	RGP10J-5025-T3	SI.DIODE		*
D1926-28	1SS133-T2	SI.DIODE		*
D1931	1SS133-T2	SI.DIODE		*

AV-32D200(A US&amp;A CA)

△ Symbol No.	Part No.	Part Name	Description	Local
<b>DIODE</b>				
D1933	ISS133-T2	SI.DIODE		*
D1942	MTZJ6.8A-T2	ZENER DIODE		*
D1951	MTZJ7.55-T2	ZENER DIODE		*

**TRANSISTOR**

Q1001	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1201	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1203-04	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1205	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1231	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1241-42	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1261	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1271-74	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1521	2SC4212/Z1	SI. TRANSISTOR		*
△ Q1531	2SD2539-LB	SI. TRANSISTOR	H. OUT	*
Q1541	2SA1037AK/QR/-X	SI. TRANSISTOR		*
△ Q1542	2SC2785/JH/-T	SI. TRANSISTOR		*
△ Q1551-52	2SA1309A/QR/-T	SI. TRANSISTOR		*
△ Q1553	2SD1408/OV/-LB	SI. TRANSISTOR		*
Q1602	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1603	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1604	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1741-42	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1743-44	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1821	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1822-23	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1831	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1832	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1911	2SA1037AK/QR/-X	SI. TRANSISTOR		*
Q1912	2SD2088-T	SI. TRANSISTOR		*
Q1921	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1922	2SD1383K/AB/-X	SI. TRANSISTOR		*
Q1923	2SA1020/Y/-T	SI. TRANSISTOR		*
Q1924	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1925	2SA949/Y/Z1-T	SI. TRANSISTOR		*
Q1926	2SC2240/GL/-T	SI. TRANSISTOR		*
Q1927-28	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1942	2SC2412K/QR/-X	SI. TRANSISTOR		*
Q1943	2SC2240/GL/-T	SI. TRANSISTOR		*
Q1944	DTC124EKA-X	DIGI. TRANSISTOR		*
Q1951	2SA949/Y/Z1-T	SI. TRANSISTOR		*

**IC**

IC1001	BA1780ST	I.C. (MONO-ANA)		*
IC1201	JCC1007A	I.C. (MONO-ANA)		*
IC1281	M52055FP-X	I.C. (MONO-ANA)		*
△ IC1421	LA7841	I.C. (MONO-ANA)		*
IC1423	AN78L09-T	I.C. (MONO-ANA)		*
△ IC1601	LA4485	I.C. (MONO-ANA)		*
IC1701	MN1874878JR	I.C.		*
IC1702	AT24C02-32D500	I.C.	(SERVICE)	*
IC1703	MN1381/Q/-T	I.C. (MONO-ANA)		*
IC1771	AN77L05-T	I.C. (MONO-ANA)		*
△ IC1901	STR-F6626	I.C. (HYBRID)		*
△ IC1941	SE135N	I.C. (HYBRID)		*
IC1971	BA17809T	I.C. (MONO-ANA)		*

△ Symbol No.	Part No.	Part Name	Description	Local
<b>OTHERS</b>				

CF1001	QAX0349-001	CERAMIC TRAP		*
CF1501	CSB503F39	CER. RESONATOR		*
CF1701	FCR12.0M25	CER. RESONATOR		*
K1421	CE42050-001Z	CORE		*
K1901-03	CE41433-001Z	BEADS CORE		*
K1905-06	CE41433-001Z	BEADS CORE		*
K1921-24	CE41433-001Z	BEADS CORE		*
△ PC1901	TLP621(B)	I.C. (PH.COUPLER)		*
△ PC1902	TLP621(B)	I.C. (PH.COUPLER)		*
△ RY1901	CESK028-001	RELAY		*
△ RY1921	CESK028-001	RELAY		*
S1421	QSL4A13-C02	LEVER SWITCH	V SENTER	*
△ TH1901	CEKP007-002	P.THERMISTOR		*
△ TU1001	QAU0133-001	TUNER		*
W1295	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1297	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1300	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1667-68	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1677	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1691-96	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1718-21	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1763-65	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1770	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1811	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1820	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1827-28	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1834	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1856	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1878-79	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1885	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1892	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1896	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1900	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
W1902	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
X1301	QAX0310-001Z	CRYSTAL		*
Y1602	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1604	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1709	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1711	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*
Y1721-22	NRSA02J-OROX	MG R	0.0Ω 1/10W J	*

**CRT SOCKET P.W. BOARD ASS'Y  
(SGR-3001A-M2)**

Refer to PARTS LIST in page 42 for this P.W. board.

**FRONT CONTROL P.W. BOARD ASS'Y  
(SGR-4001A-M2)**

Refer to PARTS LIST in page 42 for this P.W. board.

**AV-SELECTOR P.W. BOARD ASS'Y  
(SGR-8001A-M2)**

Refer to PARTS LIST in page 43 for this P.W. board.

**LINE FILTER P.W. BOARD ASS'Y  
(SGR-9002A-M2)**

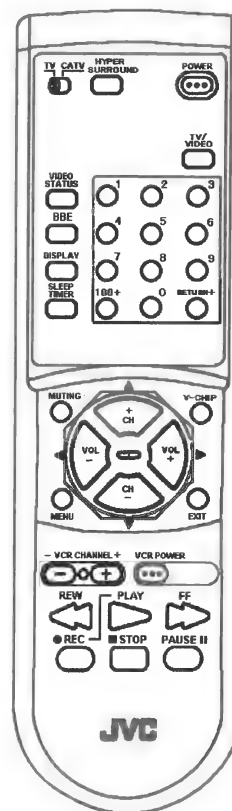
Refer to PARTS LIST in page 54 for this P.W. board.

**IF P.W. BOARD ASS'Y  
(SGR0F001A-M2)**

Refer to PARTS LIST in page 45 for this P.W. board.

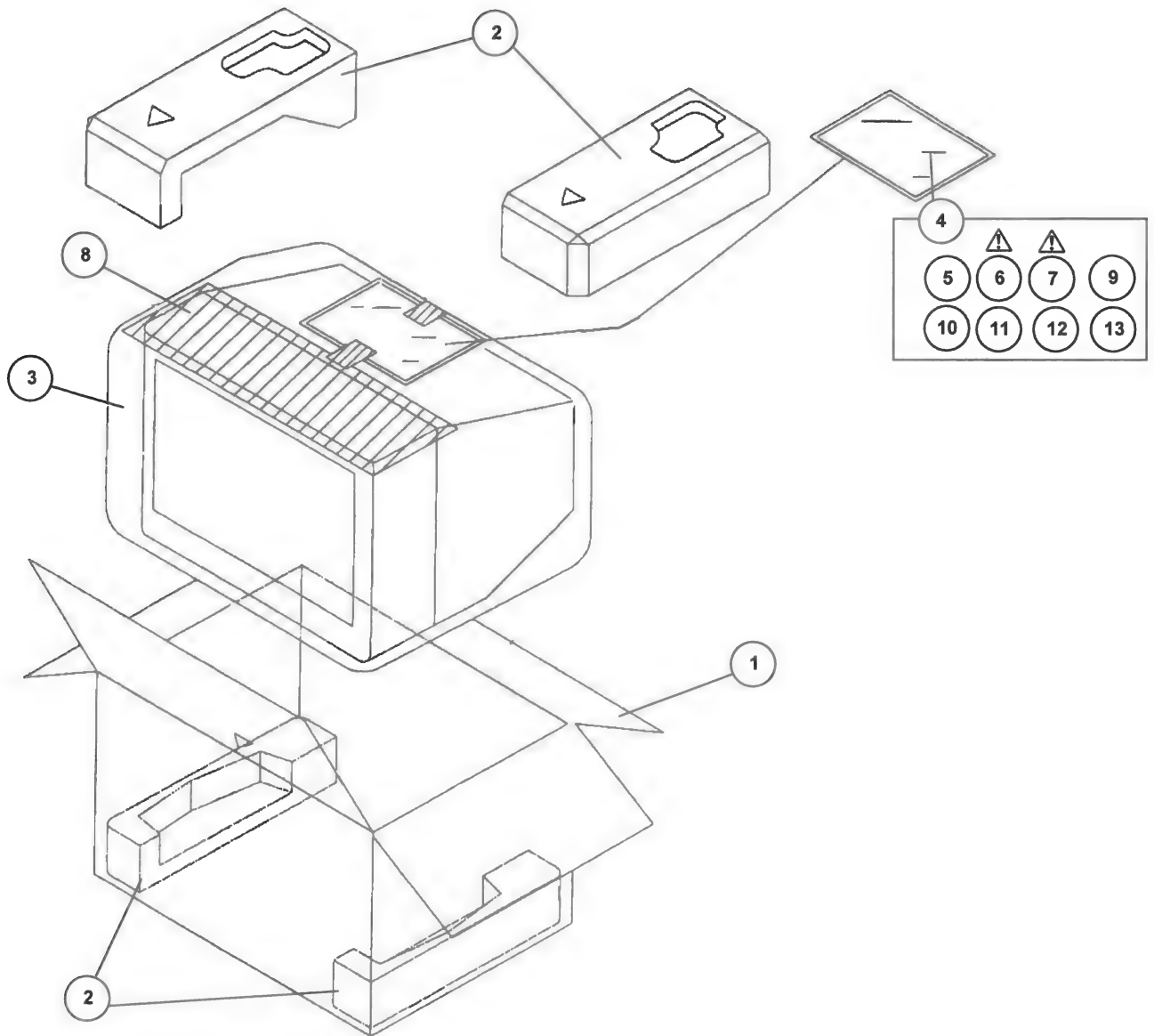
## REMOTE CONTROL UNIT PARTS LIST (RM-C342-1A) (AV-27D200 / AV-32D200)

△ Ref.No.	Part No.	Part Name	Description	Local
	UR52EC1286A	BATTERY COVER	(RM-C342-1A)	*



AV-32D200(A US&A CA)

## PACKING



# PACKING PARTS LIST

## [AV-32D200 (US&CA)]

△ Ref.No.	Part No.	Part Name	Description	Local
<b>[America Model]</b>				
1	LC10181-009A-A	PACKING CASE		*
2	LC10365-002A-A	CUSHION ASSY	4pcs in 1set	*
3	CP30056-004-A	POLY BAG		*
4	QPGA025-03505A	POLY BAG		*
5	RM-C342-1A	REMOCON UNIT		*
△ 6	LCT0328-001A-A	INST BOOK	[ENGLISH]	*
8	CP30055-A02-A	TOP COVER		*
9	BT-51006-1Q	REGISTER CARD		*
10	LCT0414-001A-A	QUICK SETUP GUID	[ENGLISH]	*
<b>[Canada Model]</b>				
1	LC10181-009A-A	PACKING CASE		*
2	LC10365-002A-A	CUSHION ASSY	4pcs in 1set	*
3	CP30056-004-A	POLY BAG		*
4	QPGA025-03505A	POLY BAG		*
5	RM-C342-1A	REMOCON UNIT		*
△ 6	LCT0328-001A-A	INST BOOK	[ENGLISH]	*
△ 7	LCT0329-001A-A	INST BOOK	[FRENCH]	*
8	CP30055-A02-A	TOP COVER		*
10	LCT0414-001A-A	QUICK SETUP GUID	[ENGLISH]	*
11	BT-52002-1Q	WARRANTY CARD		*
12	LCT0415-001A-A	QUICK SETUP GUID	[FRENCH]	*
13	BT-20071B-Q	SVC CENTER LIST		*

## [AV-32D200 (A US&A CA)]

△ Ref.No.	Part No.	Part Name	Description	Local
<b>[America Model]</b>				
1	LC10181-009A-A	PACKING CASE		*
2	LC10365-002A-A	CUSHION ASSY	4pcs in 1set	*
3	CP30056-004-A	POLY BAG		*
4	QPGA025-03505A	POLY BAG		*
5	RM-C342-1A	REMOCON UNIT		*
△ 6	LCT0328-001A-A	INST BOOK	[ENGLISH]	*
8	CP30055-A02-A	TOP COVER		*
9	BT-51006-1Q	REGISTER CARD		*
10	LCT0414-001A-A	QUICK SETUP GUID	[ENGLISH]	*
<b>[Canada Model]</b>				
1	LC10181-009A-A	PACKING CASE		*
2	LC10365-002A-A	CUSHION ASSY	4pcs in 1set	*
3	CP30056-004-A	POLY BAG		*
4	QPGA025-03505A	POLY BAG		*
5	RM-C342-1A	REMOCON UNIT		*
△ 6	LCT0328-001A-A	INST BOOK	[ENGLISH]	*
△ 7	LCT0329-001A-A	INST BOOK	[FRENCH]	*
8	CP30055-A02-A	TOP COVER		*
10	LCT0414-001A-A	QUICK SETUP GUID	[ENGLISH]	*
11	BT-52002-1Q	WARRANTY CARD		*
12	LCT0415-001A-A	QUICK SETUP GUID	[FRENCH]	*
13	BT-20071B-Q	SVC CENTER LIST		*

AV-32D200(A US&amp;A CA) AV-32D200(US&amp;CA)







## **JVC SERVICE & ENGINEERING COMPANY OF AMERICA**

### **DIVISION OF US JVC CORP.**

<b>Head office :</b>	107 Little Falls Road, Fairfield, New Jersey 07004	(973)808-9279
<b>(East Coast)</b>		
<b>Midwest :</b>	705 Enterprise St. Aurora, Illinois 60504	(630)851-7855
<b>West Coast :</b>	5665 Corporate Avenue, Cypress, California 90630	(714)229-8011
<b>Southeast :</b>	1500 Lakes Parkway, Lawrenceville, Georgia 30243	(770)339-2522
<b>Hawaii :</b>	2969 Mapunapuna Place, Honolulu, Hawaii 96819	(808)833-5828

### **JVC CANADA INC.**

<b>Head office :</b>	21 Finchdene Square Scarborough, Ontario M1X 1A7	(416)293-1311
<b>Vancouver :</b>	13040 Worster Court Richmond B.C. V6V 2B3	(604)270-1311

# **JVC**